MANUAL DE SERVIÇO

DVD VIDEO PLAYER

SD 7050 / SD 7070

SD 7050

SD 7070

ESPECIFICAÇÕES TÉCNICAS

GERAIS

Alimentação ..... 110~220V AC, 50~60Hz

Consumo ..... 8W (médio)

Dimensões aprox. (LxAxP) 360x38x215mm

Peso aprox. 1,6kg

SISTEMA

Laser ..... Laser a semicondutor,
..... comprimento de onda
..... 650nm

Sistema de sinal de cor ..... NTSC/PAL-M/PAL-N

Faixa de frequências de áudio 20Hz a 20kHz

Relação Sinal/Ruído ..... ≥90dB (Saídas analógicas)

Distorção harmônica ..... ≥-60dB

Faixa dinâmica ..... >80dB

Wow e flutter ..... Abaixo de níveis mensuráveis
(±0,001% (W de pico))

SAÍDAS

Saída de Vídeo composto ..... 1,0V (p-p), 75 ohm
sincronismo negativo.

Saída S-Vídeo ..... (Y) 1,0V (p-p), 75 ohm
(Somente SD7070) sincronismo negativo,
(C) 0,286V (p-p), 75 ohm
1 tomada Mini DIN de 4 pinos

Component vídeo ..... (Y): 1Vpp, 75Ω, sincronismo
negativo; (PR/PB): 0,7Vpp, 75Ω

Saída de Áudio ..... 0,5 V p-p), 75 ohm 1 tomada RCA
(áudio digital)

Saída de Áudio
(áudio analógico) ..... 2,0Vrms (1 khz, 0dB), 10 Kohm,
2 tomadas RCA (L, R)

- **Projeto e especificações estão sujeitos a alterações sem aviso prévio.**
- **Aviso: a cópia não autorizada de materiais áudio visuais para uso doméstico pode infringir os direitos de terceiros.**

SEMP

ÍNDICE

ESPECIFICAÇÕES TÉCNICAS ..... CAPA

1- DIAGRAMA DE BLOCOS 3

2- DIAGRAMAS DE CIRCUITOS 13

3- NÍVEIS DE TENSÃO 22

4- FORMAS DE ONDA 25

5- LAY-OUT DAS PLACAS DE CIRCUITO IMPRESSO 28

6- VISTA EXPLODIDA 34

7- LISTA DE COMPONENTES 36

ANOTAÇÕES 41

CUIDADO ! COMPONENTES SENSÍVEIS A DESCARGAS ELETROSTÁTICAS

Alguns semicondutores (estado sólido) podem ser facilmente danificados pela eletricidade estática. Tais componentes são comumente chamados de "componentes sensíveis eletrostaticamente" *(Electrostatically Sensitive Devices - ESD)*. Exemplos típicos de *ESD's* são os circuitos integrados, transistores de efeito de campo e *chips* semicondutores. As técnicas a seguir devem ser utilizadas para ajudar a reduzir a incidência de danos aos componentes causados por eletricidade estática.

1. Mantenha o componente em sua embalagem original até o momento de sua utilização. Se necessário armazená-lo de outro modo, acondicione-o exclusivamente em material anti-estático.
2. Prepare uma estação de trabalho anti-estática para manuseio da placa montada e/ou componente *ESD*:
   - 2.1. Disponha de uma manta dissipativa sobre a bancada/mesa de trabalho.
   - 2.2. Providencie uma pulseira para descarga de eletricidade estática disponível no comércio. Efetue diariamente a aferição da pulseira.
   - 2.3. Aterre ambos, manta e pulseira, a uma malha reconhecidamente aterrada.
   - 2.4. Disponha todo o material necessário ao trabalho sobre a manta; minimize os movimentos.

   No momento em que for manusear a placa/componente, coloque a pulseira.

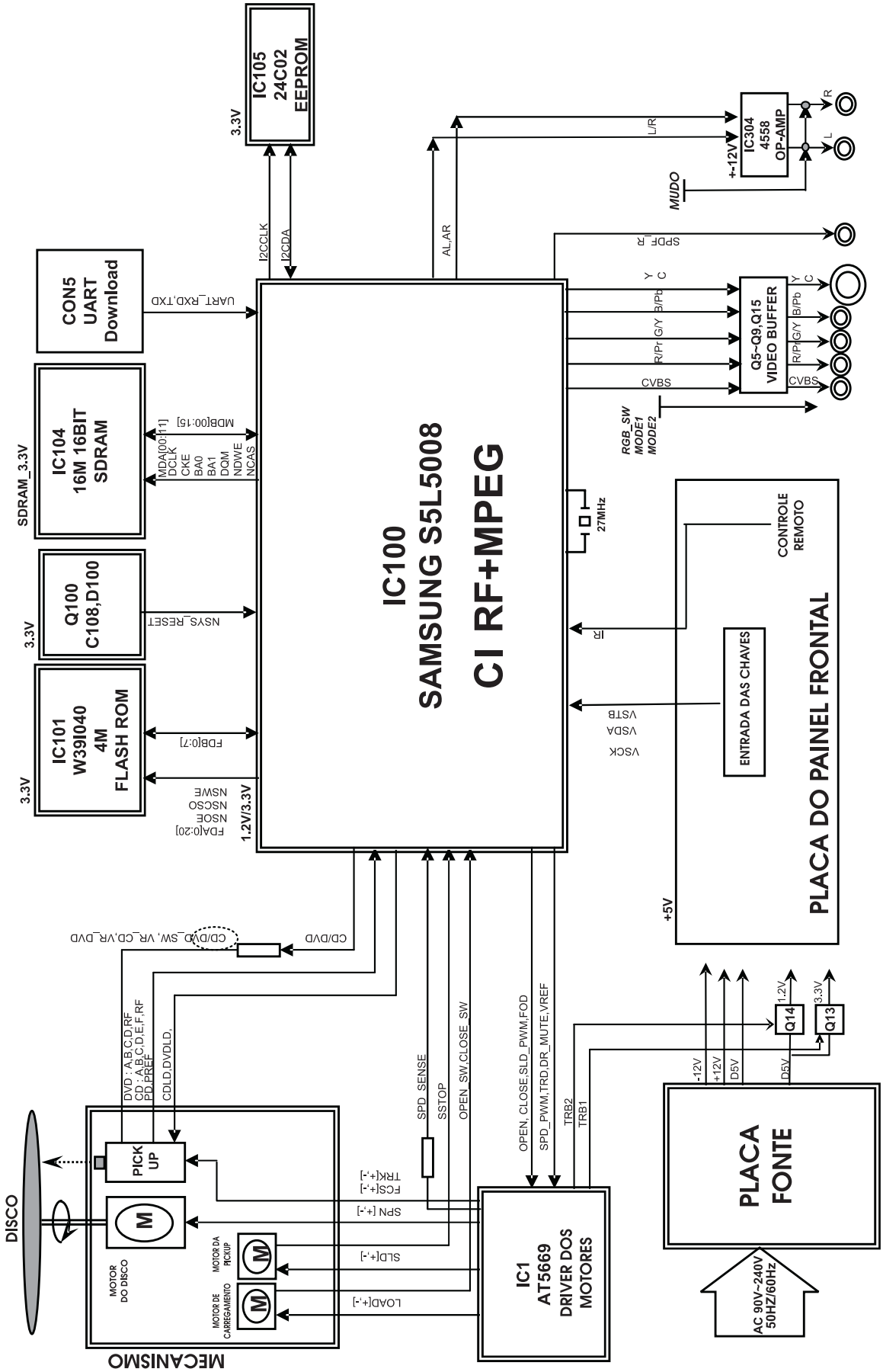
IMPORTANTE !

Assegure-se de que não haja qualquer potencial que seja aplicado ao chassi ou circuito bem como retire a pulseira antes de energizar a unidade sob teste/reparo a fim de evitar riscos de choque elétrico.

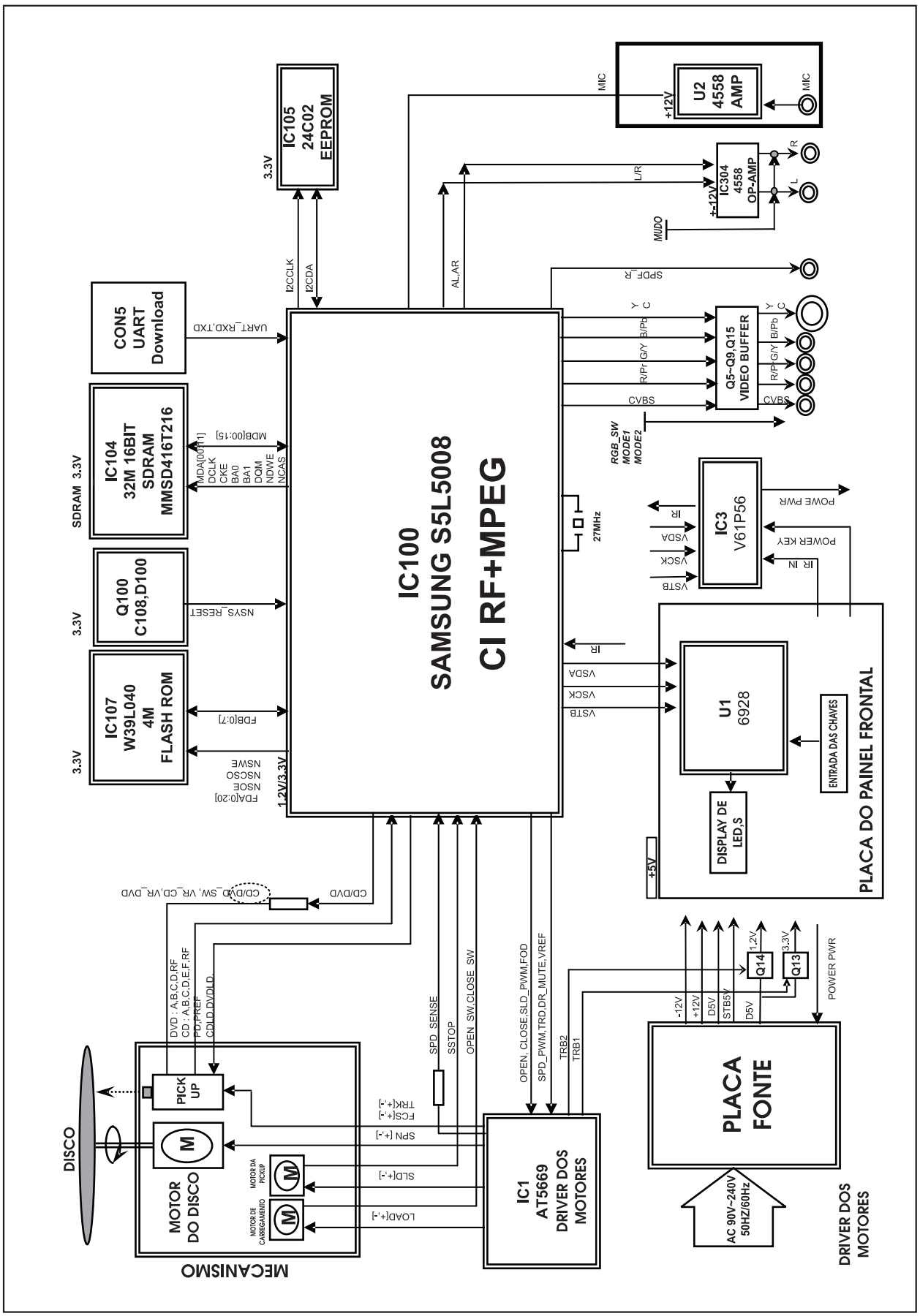
3. Use somente ferros-de-soldar com a ponta aterrada para soldar ou retirar componentes sensíveis à eletrostática.
4. Não utilize produtos químicos cujo propelente usado seja freon. Eles podem gerar cargas elétricas suficientes para danificar componentes *ESD*.

1- DIAGRAMA DE BLOCOS

1.1- Diagrama de blocos - SD 7050

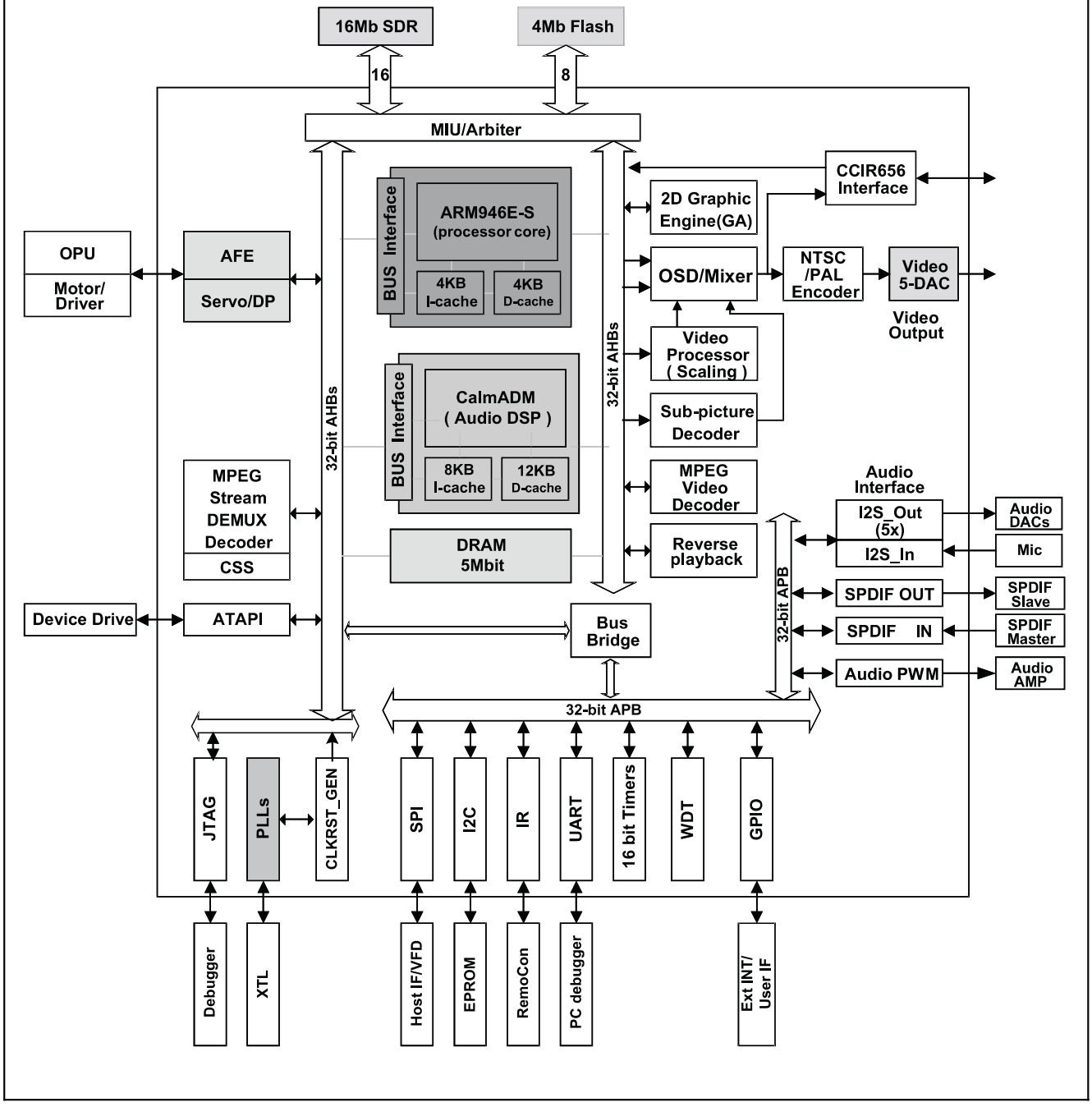


1.2- Diagrama de blocos - SD 7070

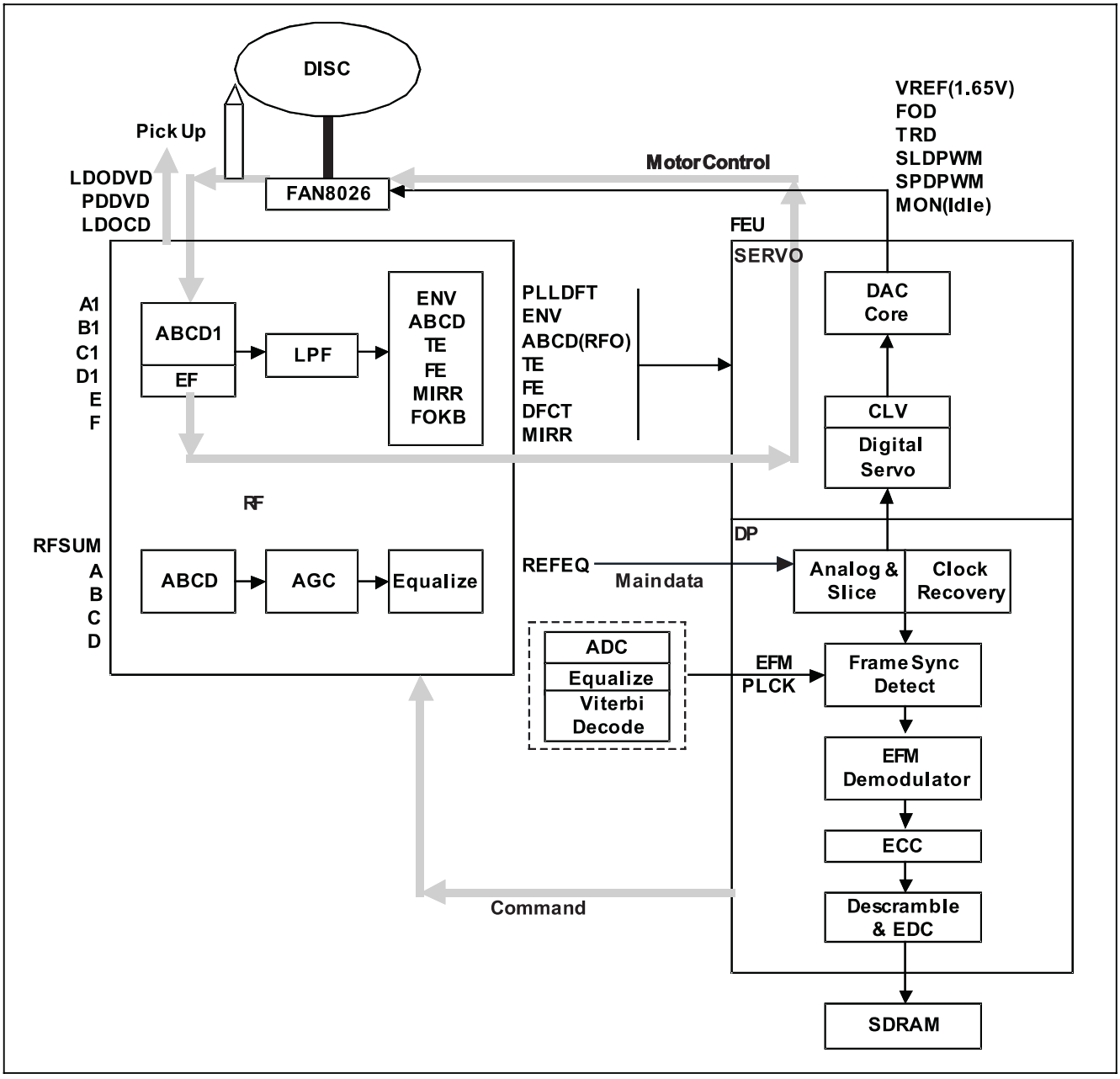


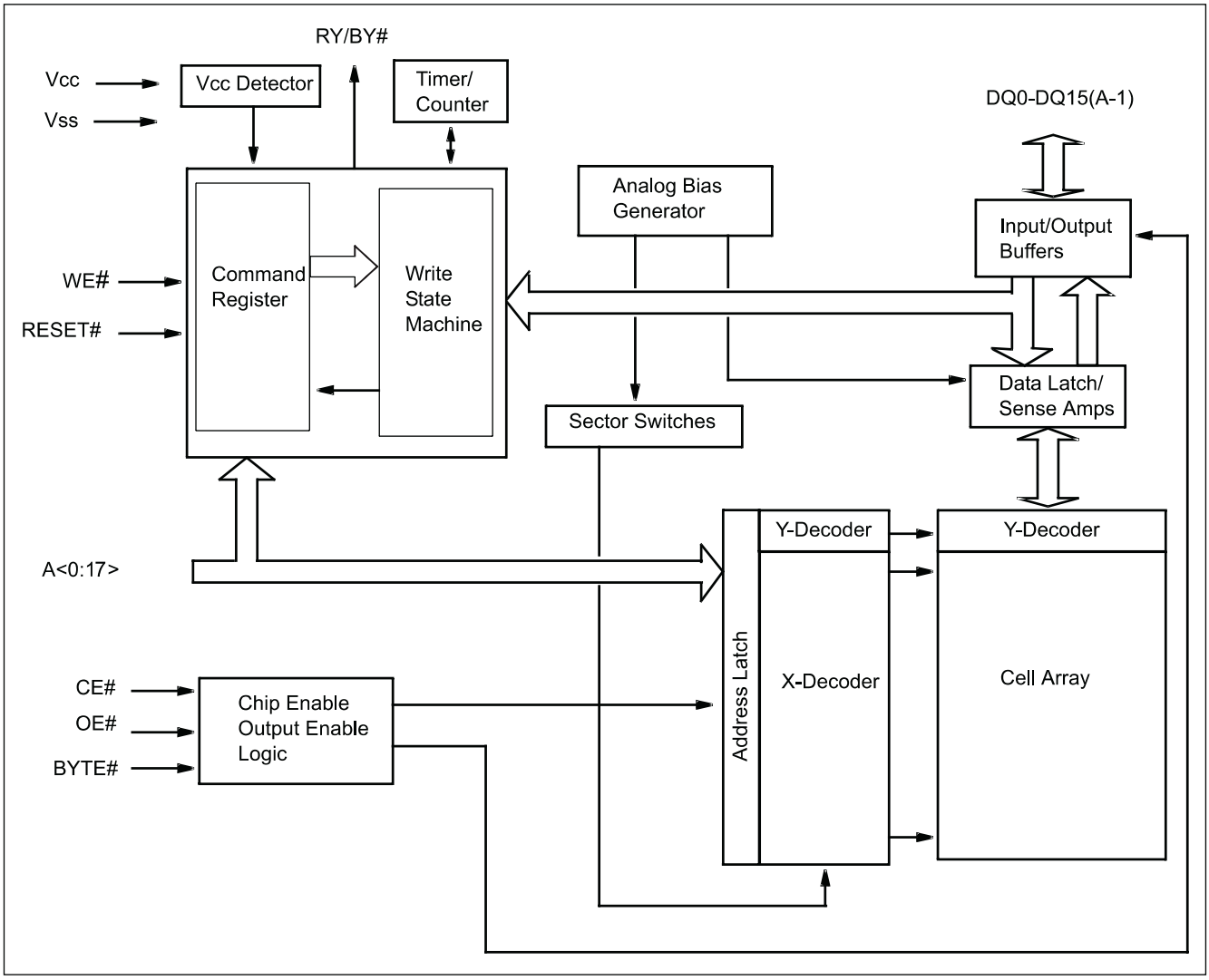
1.3- Diagrama de blocos dos circuitos integrados

PROCESSADOR MPEG S5L5008

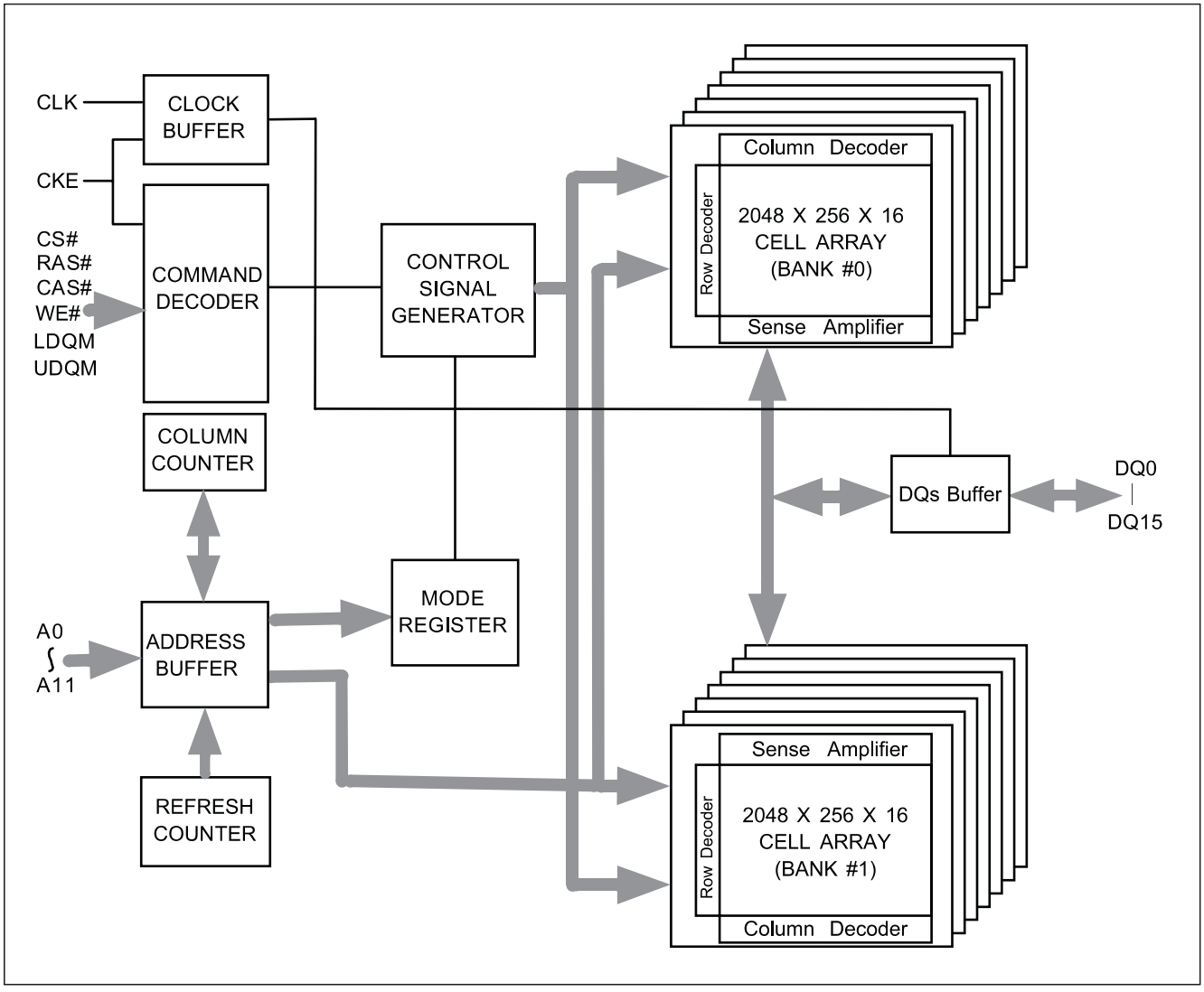


Fluxo de sinal do controlador do servomecanismo S5L5008

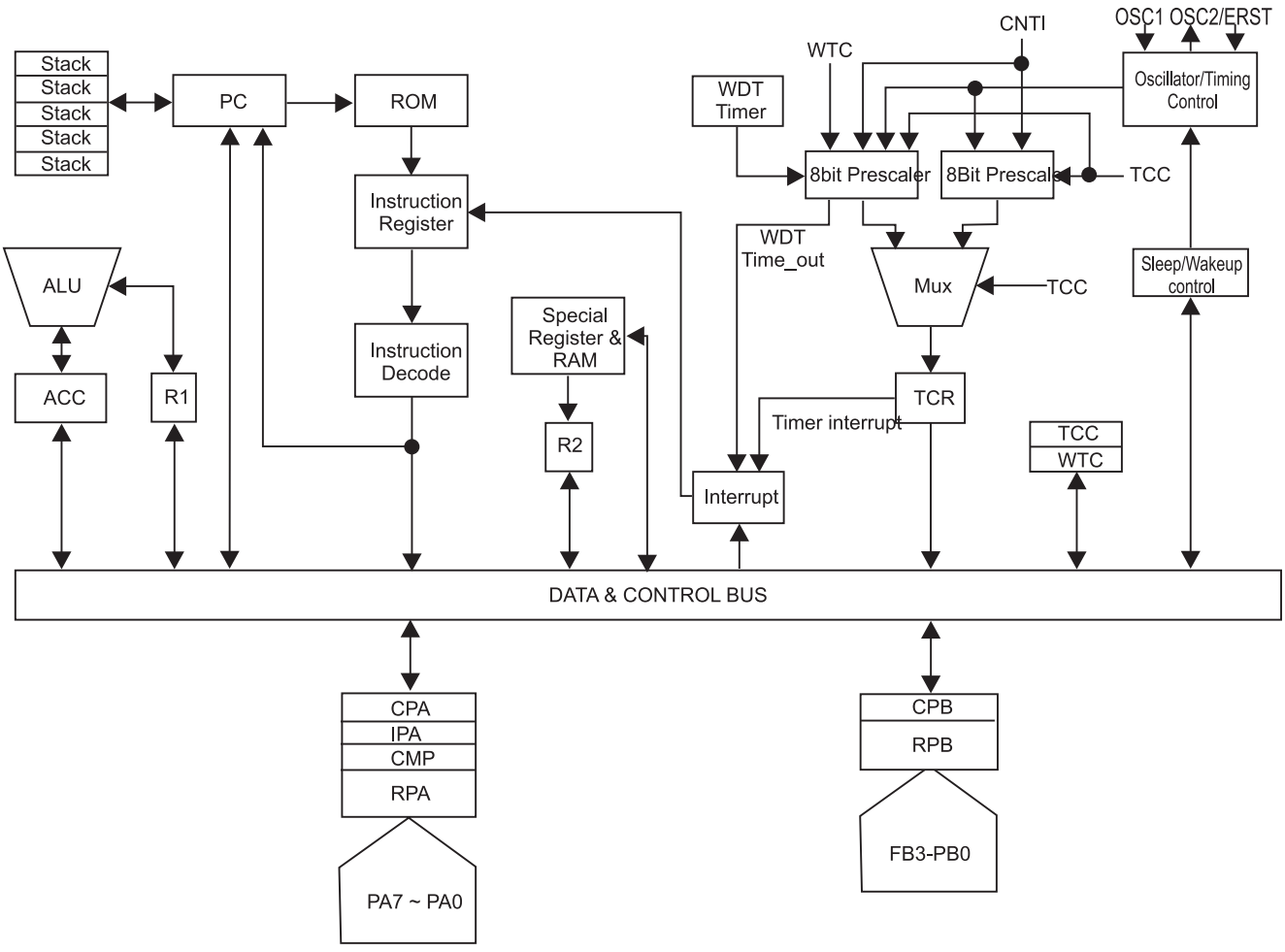



RY/BY#
Vcc
Vss
Vcc Detector
Timer/
Counter
DQ0-DQ15(A-1)
Analog Bias
Generator
Input/Output
Buffers
WE#
RESET#
Command
Register
Write
State
Machine
Data Latch/
Sense Amps
Sector Switches
A<0:17>
Y-Decoder
Y-Decoder
Address Latch
X-Decoder
Cell Array
CE#
OE#
BYTE#
Chip Enable
Output Enable
Logic

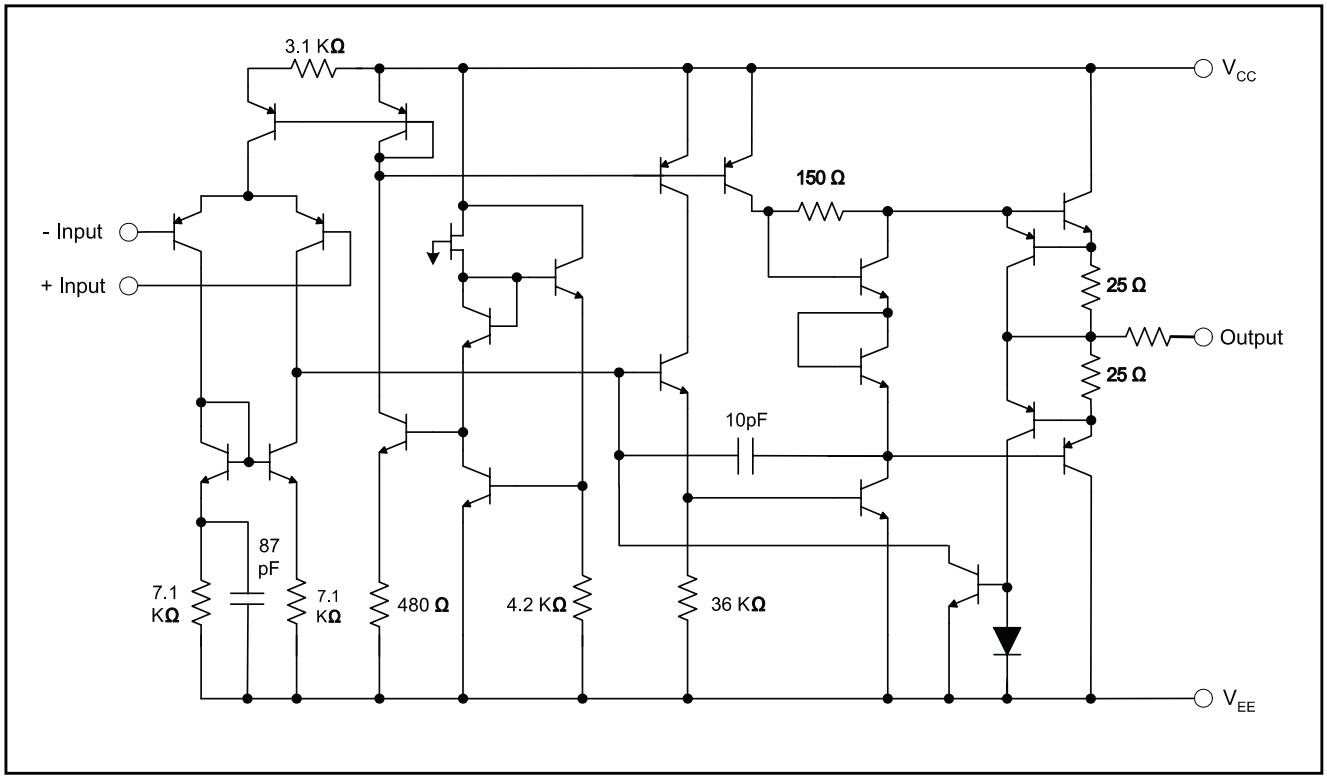
Memória SDRAM AD16162VT-6



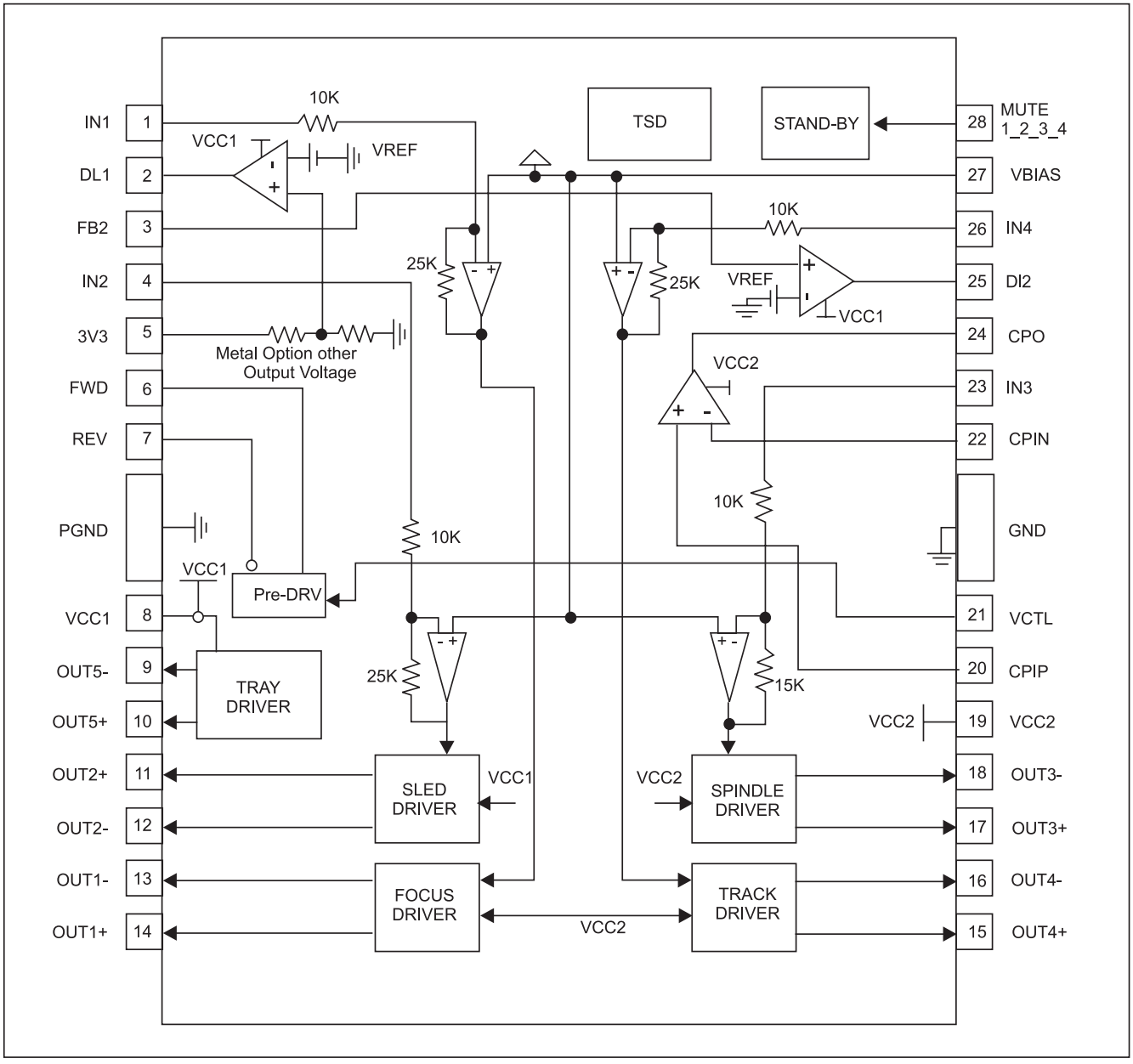
Microcontrolador V6/P56 (somente SD7070)



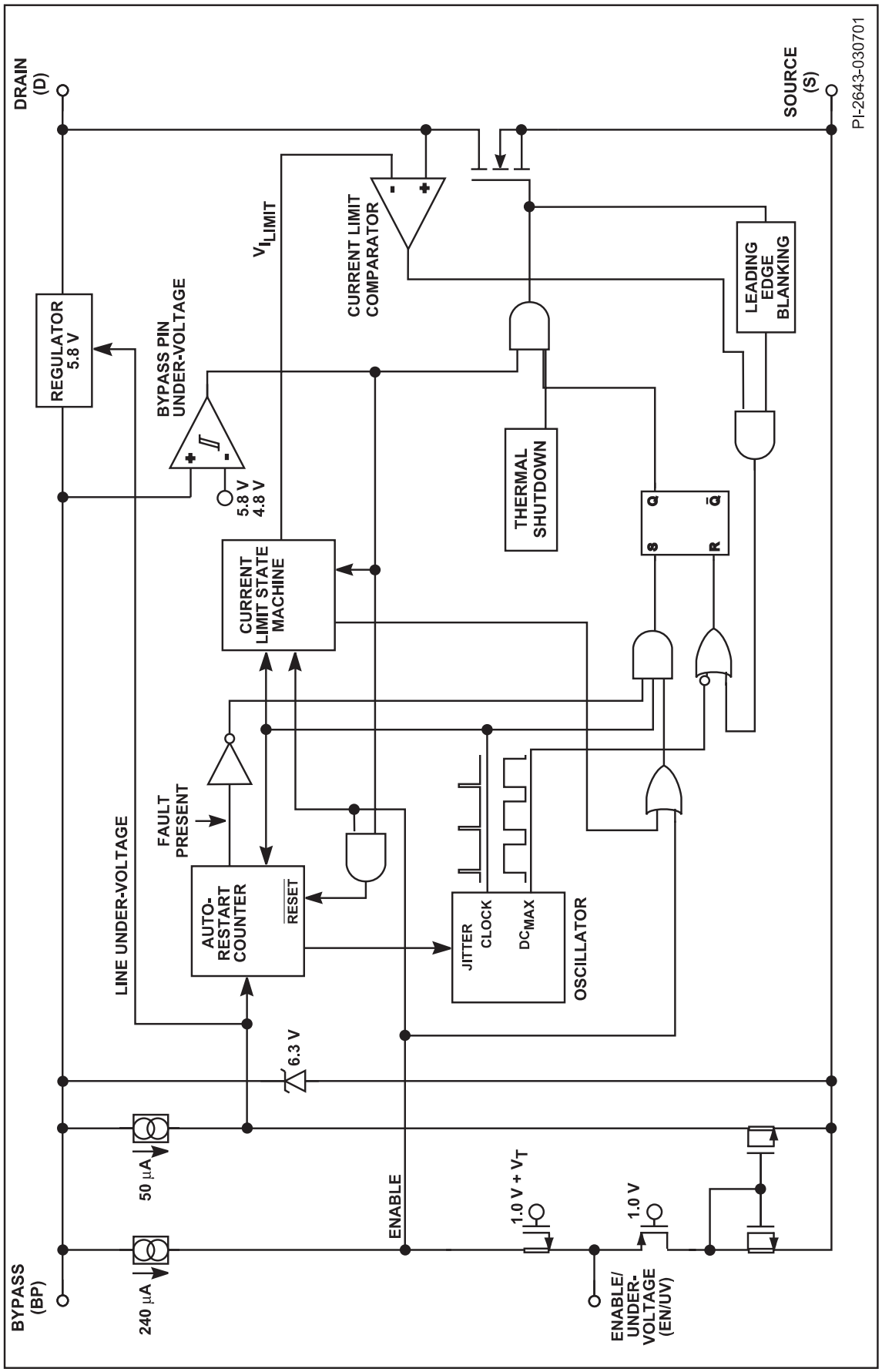
Amplificador operacional AZ 4558 CM-EI



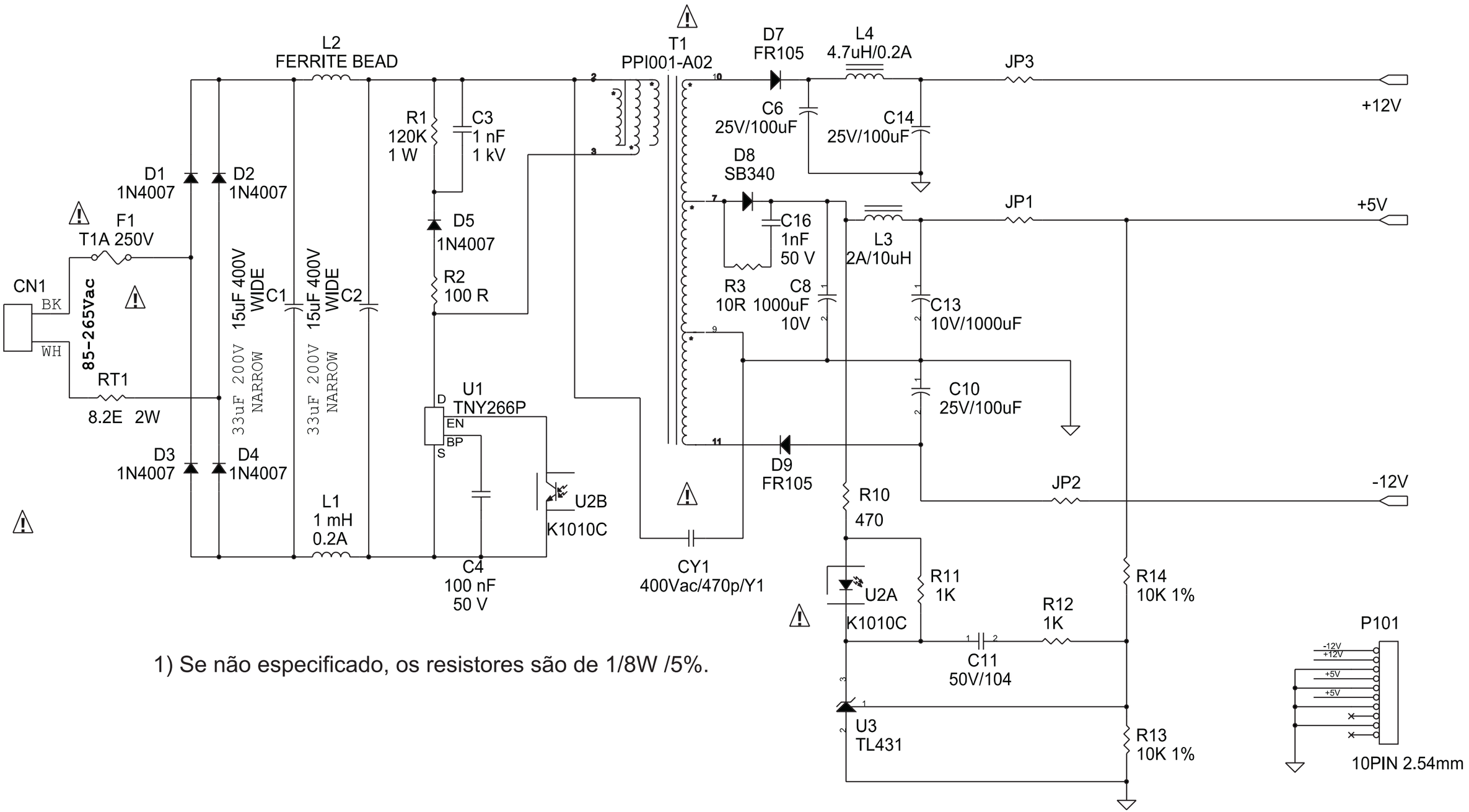
Driver dos motores AT5669



Circuito de chaveamento da fonte TNY267PN

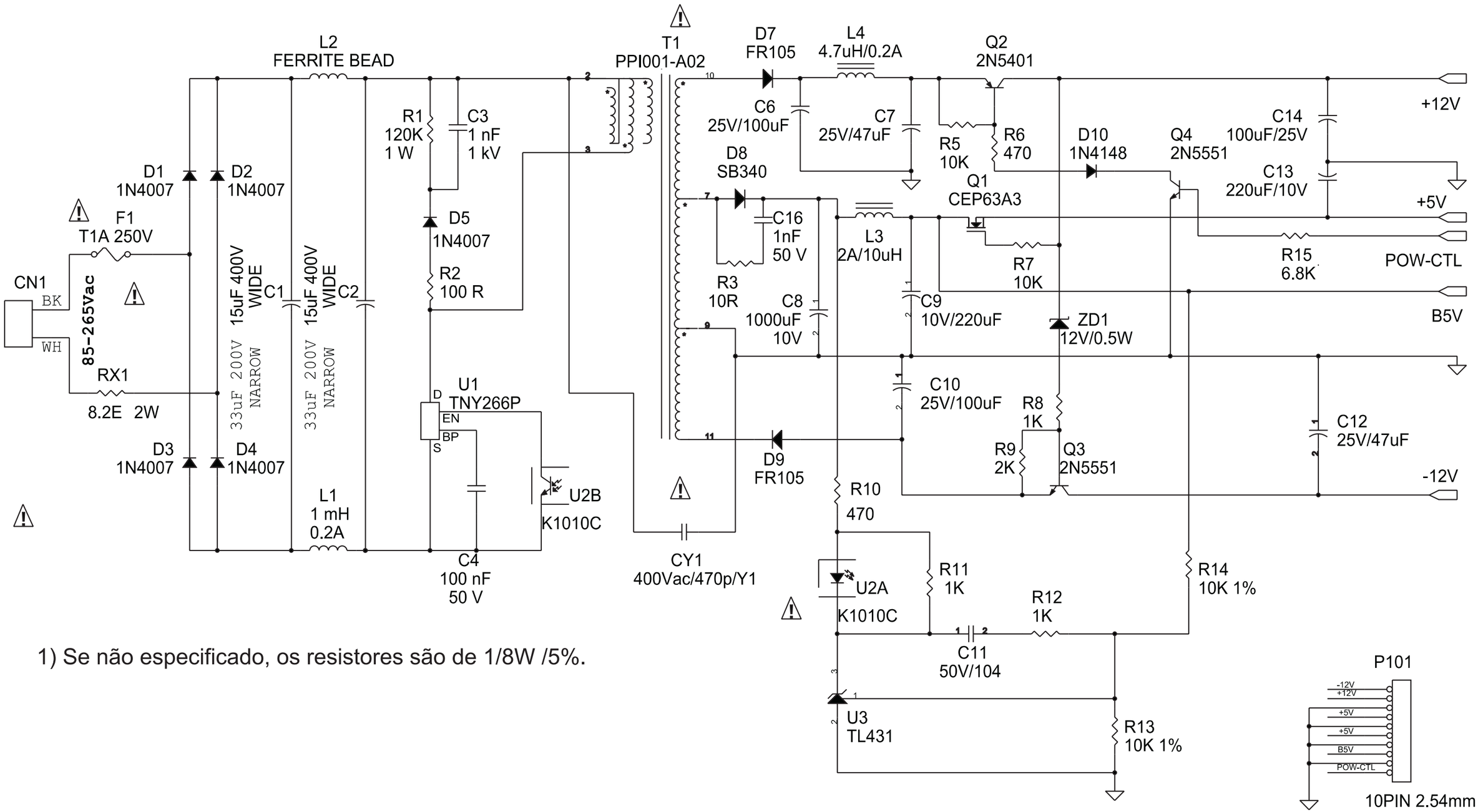


2.1- Diagrama de circuito da fonte SD 7050



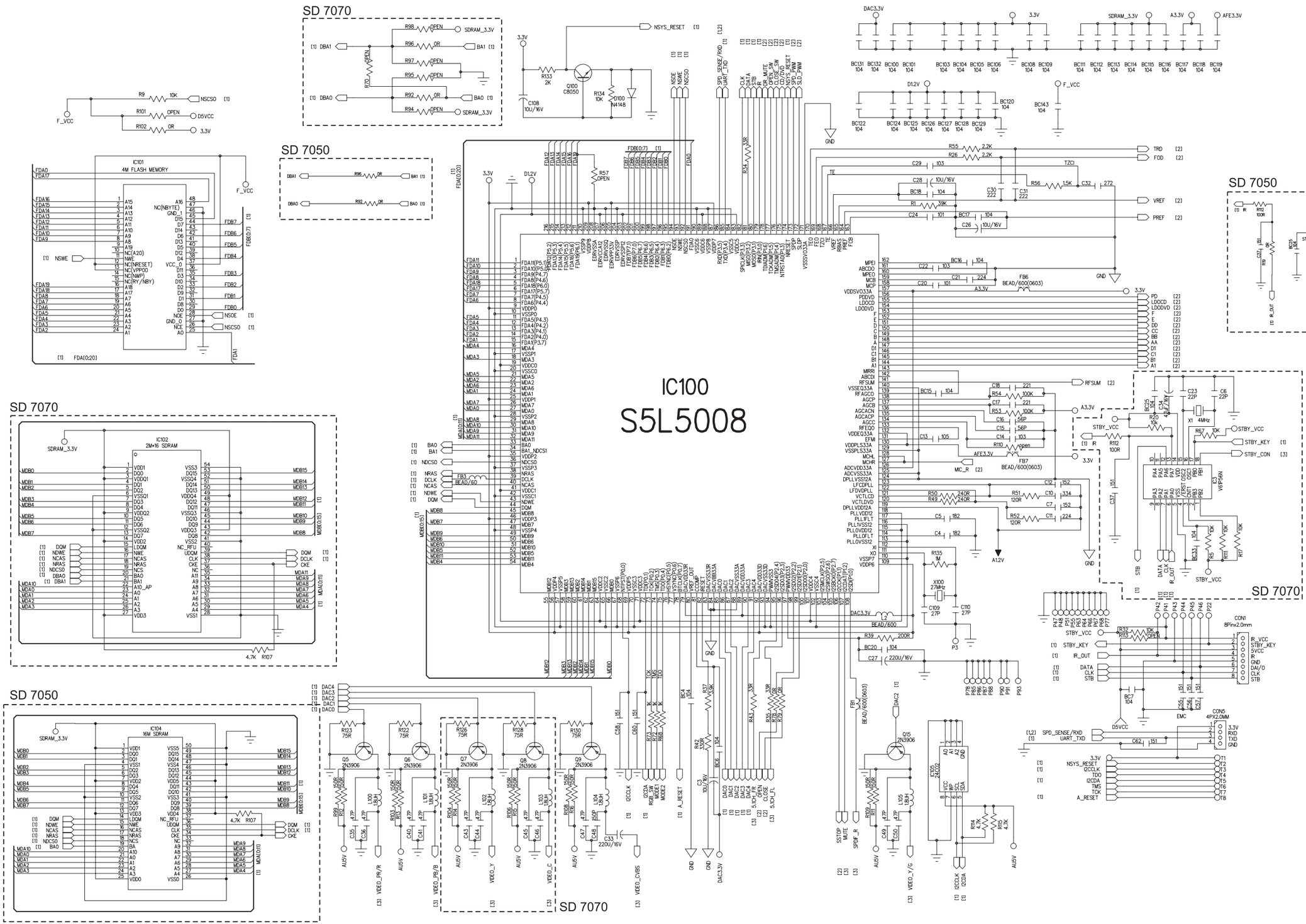
1) Se não especificado, os resistores são de 1/8W /5%.

2.2 - Diagrama de circuito da fonte SD 7070

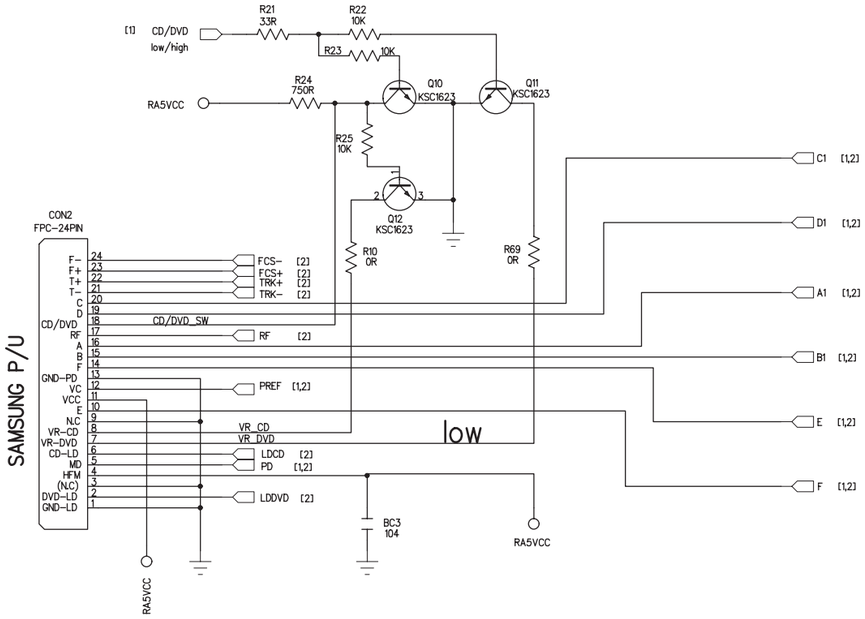


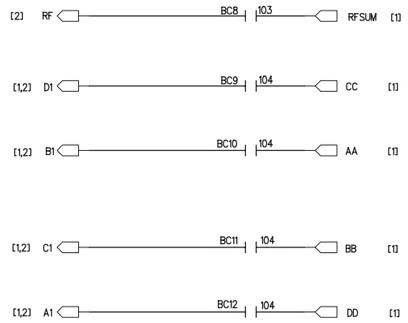
1) Se não especificado, os resistores são de 1/8W /5%.

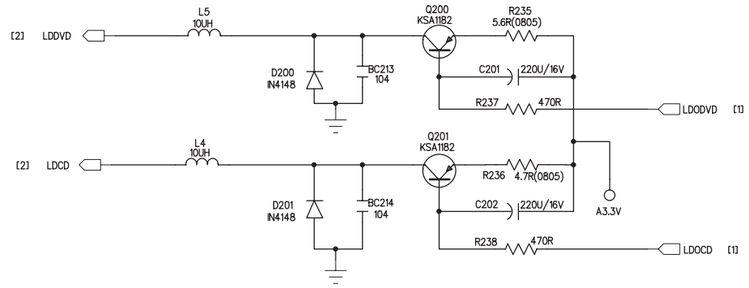
2.3- Diagrama de circuito do processador MPEG

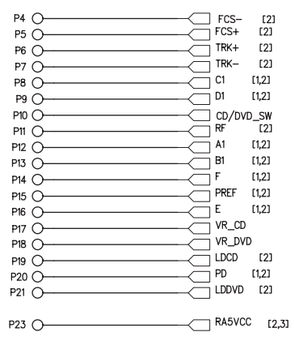


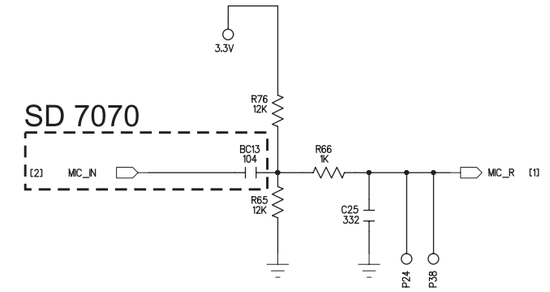
2.4 - Diagrama de circuito dos drives da pickup e dos motores

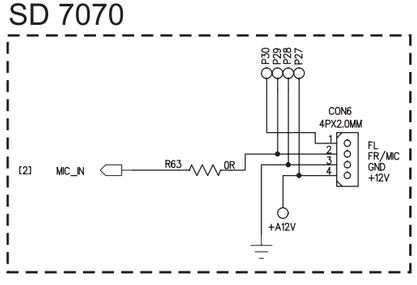


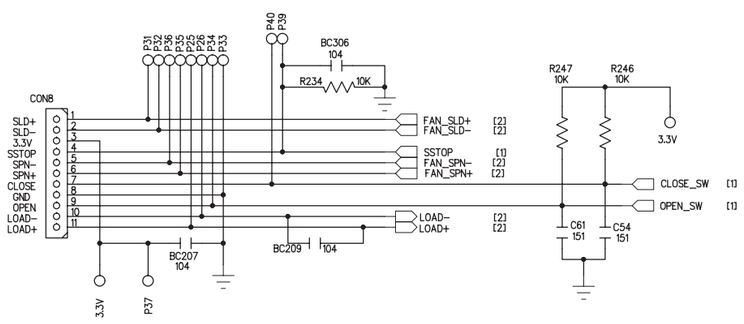


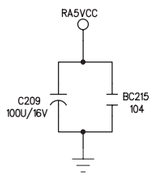


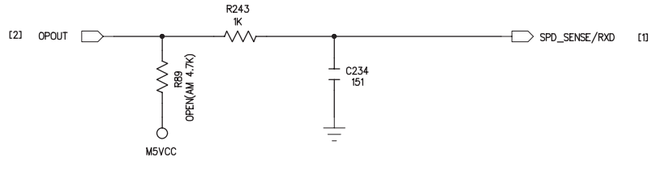


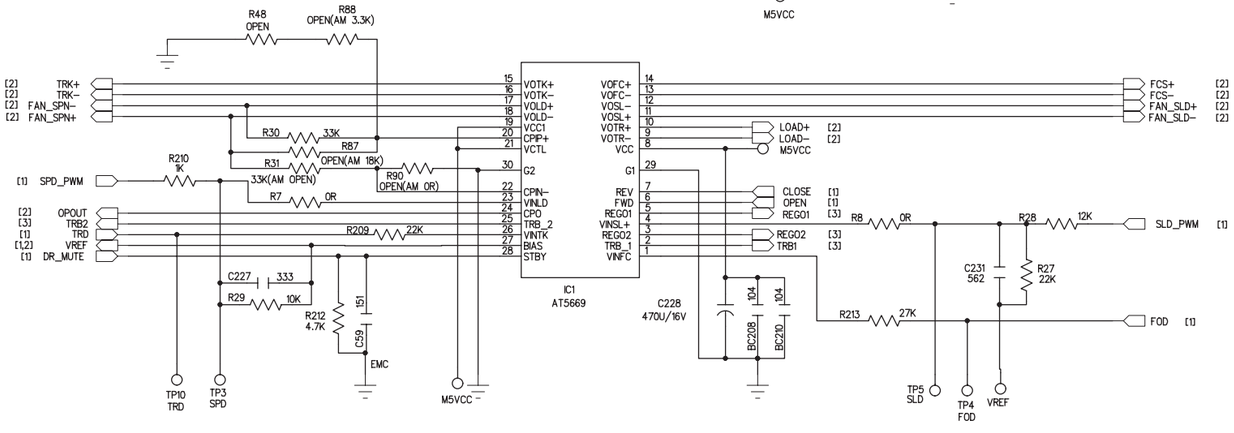






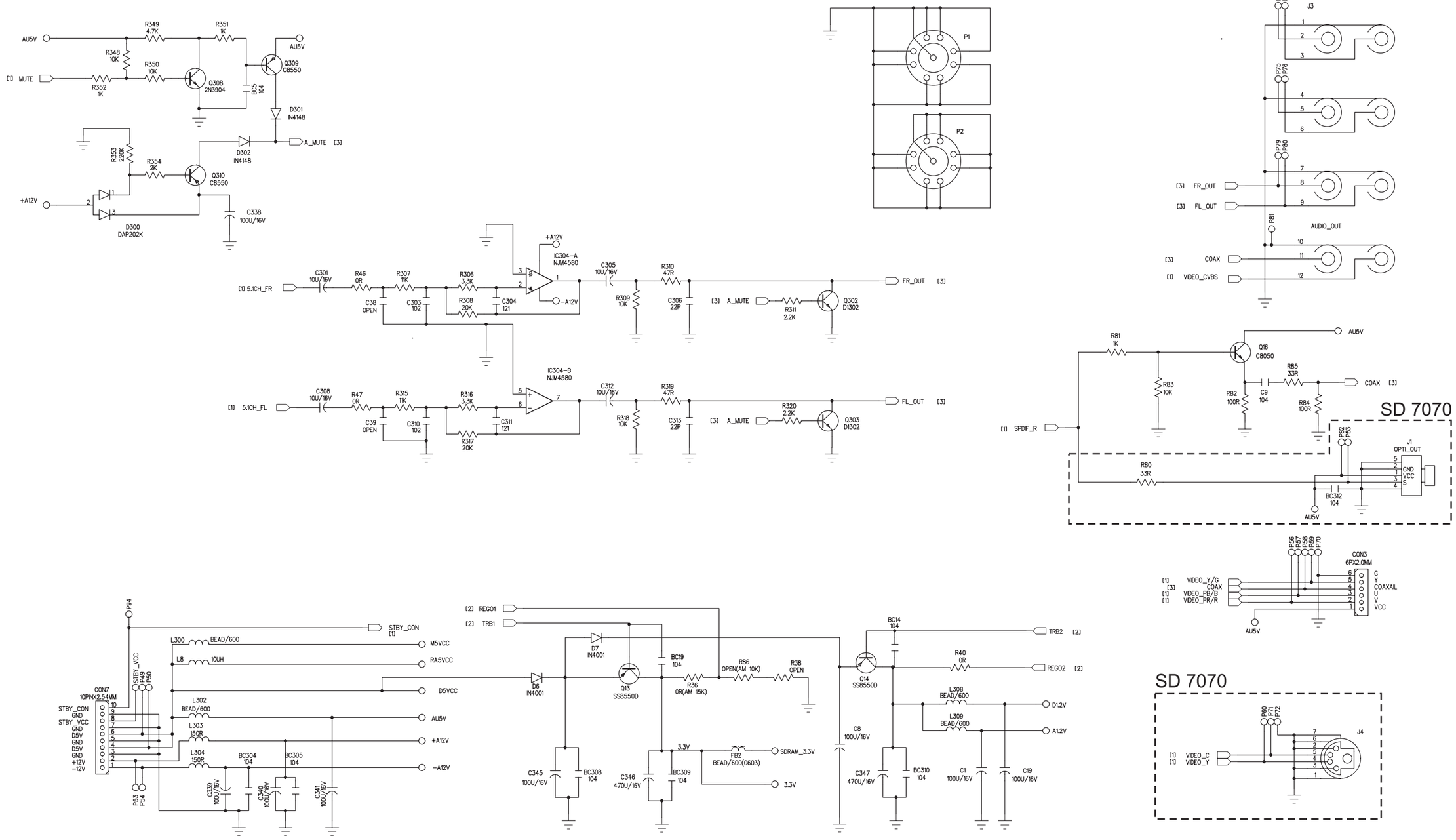




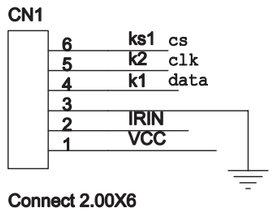


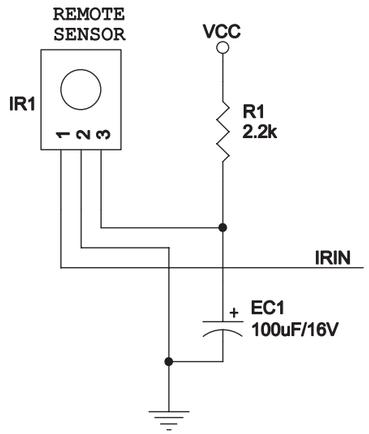
	R30	R31	R36	R38	R40	R48	R86	R87	R88	R89	R90
AT5669	33K	33K	0R	OPEN	0R	OPEN	OPEN	OPEN	OPEN	OPEN	OPEN
SA5869	33K	OPEN	15K	560R	10K	8.2K	9.1K	OPEN	33K	15K	0R
AM5869	OPEN	OPEN	15K	330R	10K	3.9K	9.1K	33K	560R	15K	0R
CMD4509	OPEN	OPEN	15K	560R	10K	3.3K	8.2K	33K	470R	15K	0R

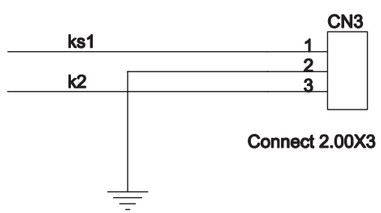
2.5 - Diagrama de circuito das saídas de áudio e vídeo

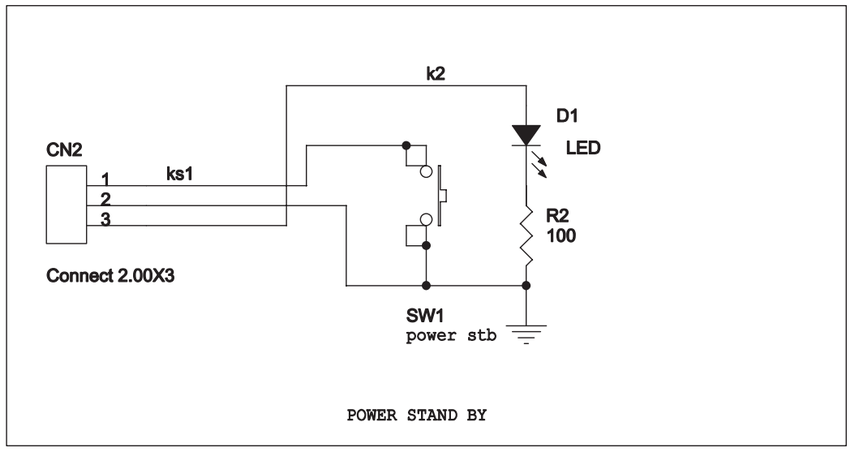


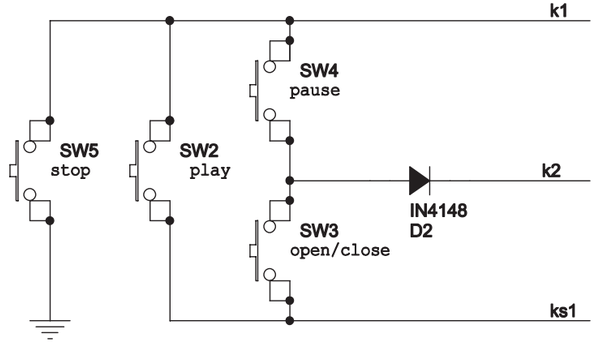
2.6 - Diagrama de circuito da placa do painel frontal SD 7050



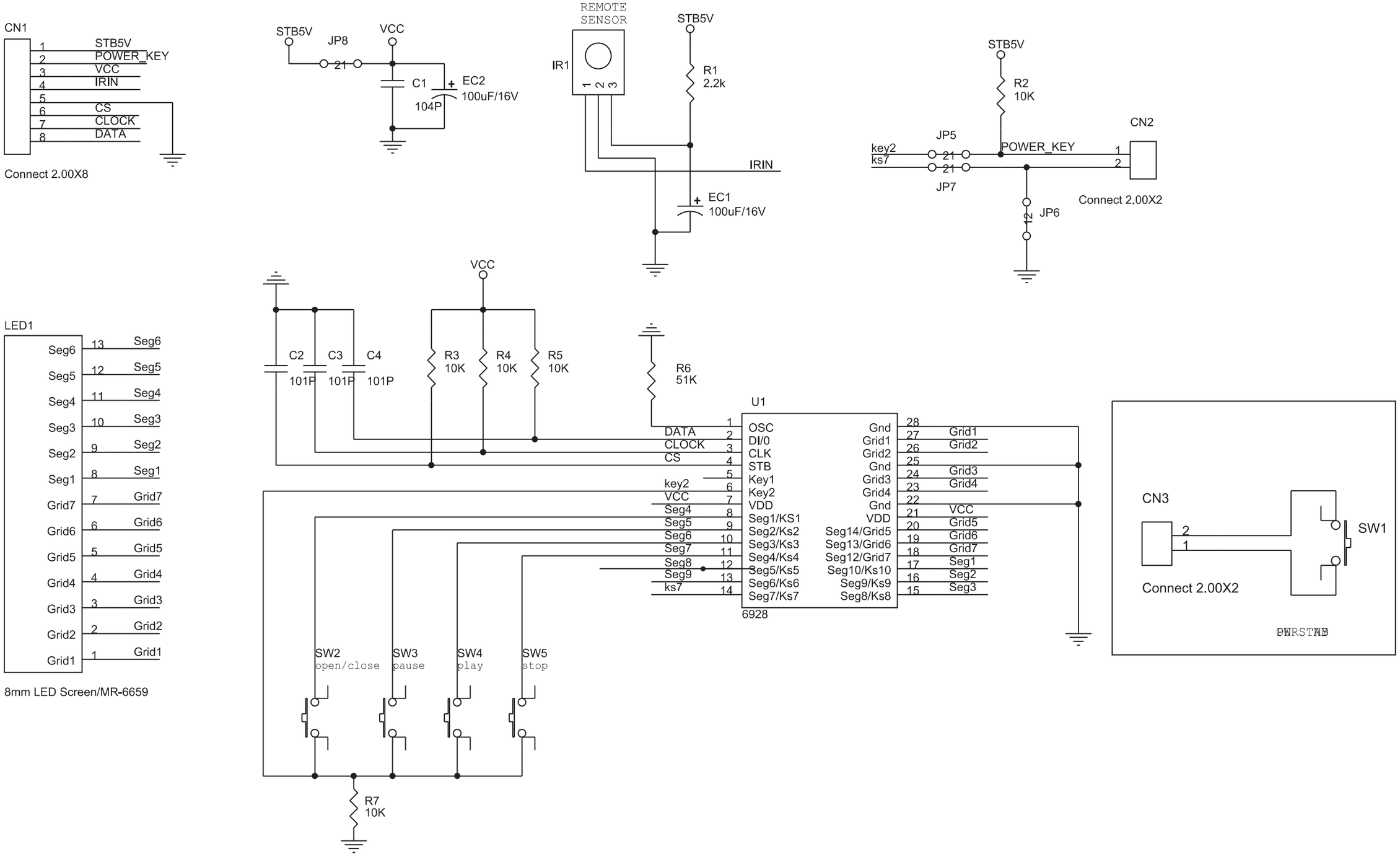




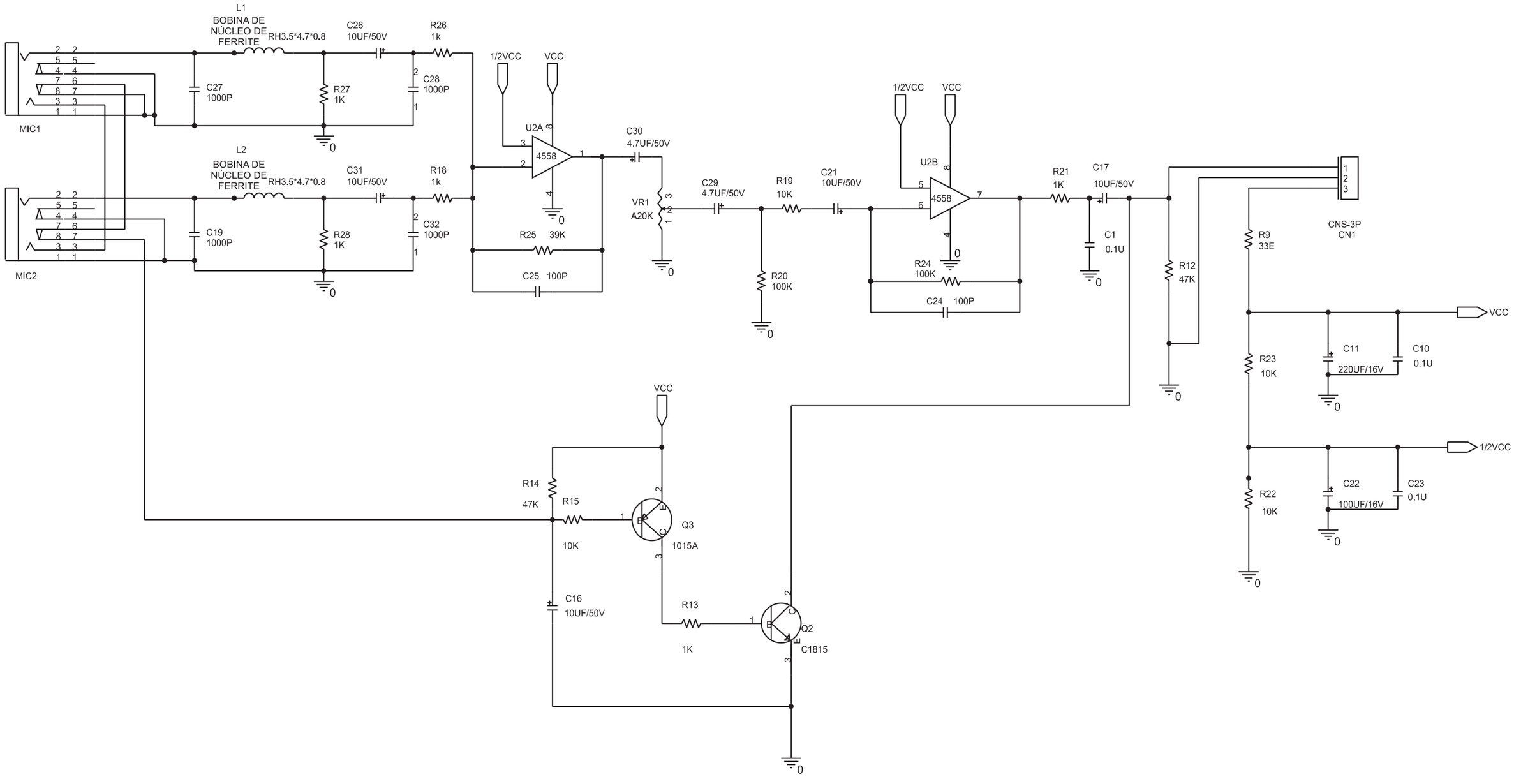




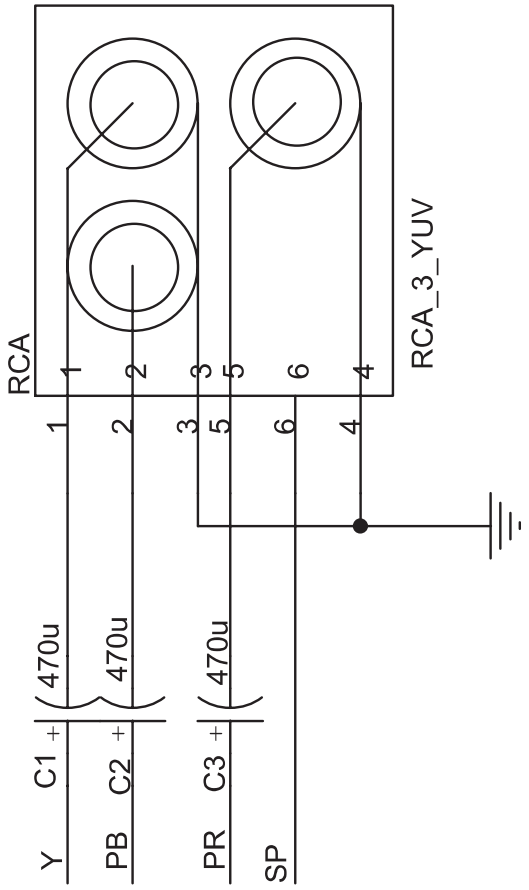
2.7 - Diagrama de circuito da placa do painel frontal SD 7070

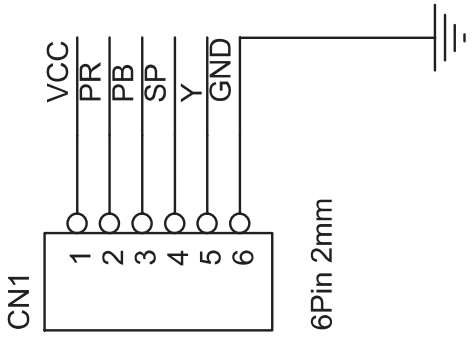


2.8 - Diagrama de circuito da placa dos microfones (somente SD 7070)



2.9 - Diagrama de circuito da placa YUV (saída de vídeo componentes)





3- NÍVEIS DE TENSÃO

U1 TNY266PN

PINO	1	2	3	4	5	6	7
TENSÃO	5.838V	0V	0V	0.777V	311V	0V	0V

U2 K1010C

PINO	1	2	3	4
TENSÃO	4.456V	3.458V	0V	0.777V

U3 TL431ACZ-AP 2.5V

PINO	R	A	K
TENSÃO	2.501V	0V	3.461V

IC3 V61P56N (Somente para SD 7070VK)

	TENSÃO			TENSÃO			TENSÃO	
PINO	STOP	PLAY	**PINO**	STOP	PLAY	**PINO**	STOP	PLAY
1	4.9V	4.9V	**7**	2.3V	2.3V	**13**	4.4V	4.4V
2	0V	0V	**8**	2.3V	2.3V	**14**	4.9V	4.9V
3	4.9V	4.9V	**9**	0V	0V	**15**	3V	3V
4	4.9V	4.9V	**10**	0V	0V	**16**	2.4V	2.4V
5	0V	0V	**11**	0V	0V	**17**	4.85V	4.85V
6	4.9V	4.9V	**12**	2.3V	2.3V	**18**	4.85V	4.85V

IC101 ES29LV400DB

	TENSÃO			TENSÃO			TENSÃO			TENSÃO			TENSÃO			TENSÃO	
PINO	STOP	PLAY	**PINO**	STOP	PLAY	**PINO**	STOP	PLAY	**PINO**	STOP	PLAY	**PINO**	STOP	PLAY	**PINO**	STOP	PLAY
1	0.8V	0.8V	**10**	0V	0V	**19**	2.8V	2.7V	**28**	3.2V	3.2V	**37**	3.26V	3.26V	**46**	0V	0V
2	3V	3.0V	**11**	3.26V	3.27V	**20**	2.5V	2.3V	**29**	2.9V	3V	**38**	3.3V	3.26V	**47**	0V	0V
3	3.26V	3.26V	**12**	3.27V	3.27V	**21**	2.5V	2.8V	**30**	0.1V	0.1V	**39**	3.2V	3V	**48**	0.9V	1.5V
4	1.7V	1.7V	**13**	3.27V	3.27V	**22**	2.5V	2.5V	**31**	3V	2.6V	**40**	3V	3V			
5	2.5V	2.5V	**14**	0V	0V	**23**	2.8V	2.8V	**32**	0.1V	0.1V	**41**	0.1V	0.1V			
6	1.8V	1.8V	**15**	0V	0V	**24**	2.8V	2.8V	**33**	2.6V	2.9V	**42**	3V	2.5V			
7	2.4V	2.4V	**16**	0V	0V	**25**	1.4V	2V	**34**	0.1V	0.1V	**43**	0.1V	0.1V			
8	1.2V	1.2V	**17**	2.8V	3.2V	**26**	3.2V	3.1V	**35**	3V	2.9V	**44**	3V	2V			
9	0V	0V	**18**	3V	2.1V	**27**	0V	0V	**36**	0.1V	0.1V	**45**	1.4V	2.2V			

IC104 AD16162VT-6 (SD 7050S)

	TENSÃO			TENSÃO			TENSÃO			TENSÃO			TENSÃO			TENSÃO	
PINO	STOP	PLAY	**PINO**	STOP	PLAY	**PINO**	STOP	PLAY	**PINO**	STOP	PLAY	**PINO**	STOP	PLAY	**PINO**	STOP	PLAY
1	3.22V	3.22V	**10**	0V	0V	**19**	2.3V	2.3V	**28**	1.3V	2V	**37**	0V	0V	**46**	2.2V	2.2V
2	0V	0V	**11**	1.3V	2.3V	**20**	0.7V	1.5V	**29**	1.2V	2V	**38**	3.2V	3.2V	**47**	0V	0V
3	2.26V	2.30V	**12**	2.8V	3V	**21**	0.5V	0.9V	**30**	1.2V	2V	**39**	0V	0V	**48**	1.2V	2V
4	2.3V	2.2V	**13**	3.3V	3.3V	**22**	0.7V	1V	**31**	1V	1.5V	**40**	1.2V	2.3V	**49**	1.2V	2V
5	0V	0V	**14**	3V	3V	**23**	0.8V	1V	**32**	0.7V	1V	**41**	0V	0V	**50**	0V	0V
6	3V	3.0V	**15**	3.2V	3.2V	**24**	1V	1.2V	**33**	0V	0V	**42**	1.6V	2V			
7	3.27V	3.27V	**16**	3.2V	3.28V	**25**	3.23V	3.23V	**34**	3.2V	3.2V	**43**	1.6V	2.2V			
8	1.8V	1.7V	**17**	3.2V	3V	**26**	0V	0V	**35**	2V	2V	**44**	3.2V	3.2V			
9	3.2V	2.8V	**18**	3.3V	3.3V	**27**	1.2V	1.5V	**36**	3V	3V	**45**	1.1V	2V			

IC102 MMSD416T216-0 (SD 7070VK)

	TENSÃO			TENSÃO			TENSÃO			TENSÃO			TENSÃO			TENSÃO	
PINO	STOP	PLAY	**PINO**	STOP	PLAY	**PINO**	STOP	PLAY	**PINO**	STOP	PLAY	**PINO**	STOP	PLAY	**PINO**	STOP	PLAY
1	3.32V	3.32V	**10**	1.3V	1.25V	**19**	3.0V	3.3V	**28**	0V	0V	**37**	3.3V	3.3V	**46**	0V	0V
2	2.5V	1.1V	**11**	1.8V	1.7V	**20**	0V	0V	**29**	0.4V	0.8	**38**	1.6V	1.6V	**47**	2.6V	2.1V
3	3.32V	3.32V	**12**	0V	0V	**21**	1.8V	1.6V	**30**	1.2V	1.32V	**39**	2.9V	2.98V	**48**	2.9V	3.15V
4	2.5V	2.7V	**13**	2.9V	2.9V	**22**	0.1V	0.1V	**31**	0.6V	0.3V	**40**	0V	0V	**49**	3.3V	3.32V
5	1.9V	1.8V	**14**	3.3V	3.3V	**23**	0.3V	0.1V	**32**	0.6V	0.6V	**41**	0V	0V	**50**	1.04V	1.2V
6	0V	0V	**15**	2.8V	2.9V	**24**	0V	0V	**33**	0V	0V	**42**	1.6V	1.82V	**51**	1.0V	1.4V
7	1.5V	2.9V	**16**	3.3V	3.27V	**25**	0V	0V	**34**	0V	0V	**43**	3.3V	3.3V	**52**	0V	0V
8	1.1V	1.25V	**17**	3.3V	3.3V	**26**	0.6V	0.4V	**35**	0V	0V	**44**	1.5V	1.0V	**53**	0V	0V
9	3.32V	3.34V	**18**	3.2V	3.3V	**27**	3.3V	3.3V	**36**	0V	0V	**45**	1.8V	1.7V	**54**	0V	0V

IC1 AT5669

	TENSÃO			TENSÃO			TENSÃO			TENSÃO			TENSÃO	
PINO	STOP	PLAY	**PINO**	STOP	PLAY	**PINO**	STOP	PLAY	**PINO**	STOP	PLAY	**PINO**	STOP	PLAY
1	1.66V	1.66V	**7**	0V	0V	**13**	2.48V	2.48V	**19**	4.88V	4.86V	**25**	2.69V	2.7V
2	3.35V	3.34V	**8**	4.87V	4.87V	**14**	2.46V	2.49V	**20**	3.71V	3.71V	**26**	1.63V	1.63V
3	1.23V	1.23V	**9**	0V	0V	**15**	2.56V	2.56V	**21**	4.86V	4.86V	**27**	1.61V	1.61V
4	1.63V	1.63V	**10**	0V	0V	**16**	2.41V	2.37V	**22**	1.11V	1.1V5	**28**	3.22V	3.22V
5	3.27V	3.27	**11**	2.57V	2.54V	**17**	3.57V	3.5V	**23**	2V	2V	**29**	0V	0V
6	0V	0V	**12**	2.39V	2.54V	**18**	1.41V	1.4V	**24**	4.71V	4.7V	**30**	0V	0V

IC304 AZ4558CM-E1

	TENSÃO			TENSÃO			TENSÃO			TENSÃO	
PINO	STOP	PLAY	**PINO**	STOP	PLAY	**PINO**	STOP	PLAY	**PINO**	STOP	PLAY
1	0V	0V	**3**	0V	0V	**5**	0V	0V	**7**	0V	0V
2	0V	0V	**4**	11.7V	11.7V	**6**	0V	0V	**8**	10V	10V

IC105 TU24C02CSF

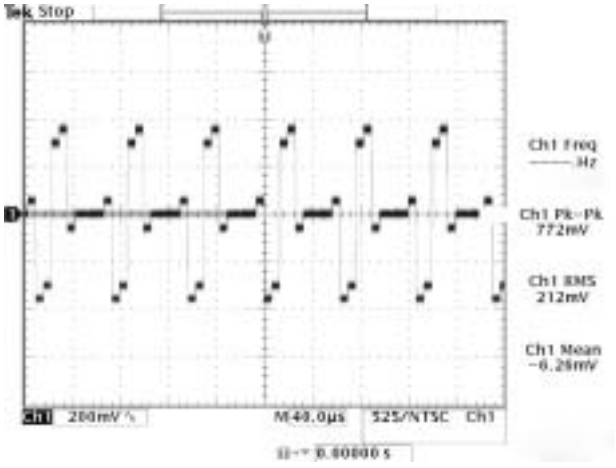
	TENSÃO			TENSÃO			TENSÃO			TENSÃO	
PINO	STOP	PLAY	**PINO**	STOP	PLAY	**PINO**	STOP	PLAY	**PINO**	STOP	PLAY
1	0V	0V	**3**	0V	0V	**5**	3.63V	3.63V	**7**	0V	0V
2	3.63V	3.63V	**4**	0V	0V	**6**	0V	0V	**8**	4.87V	4.87V

IC100 S5L5008

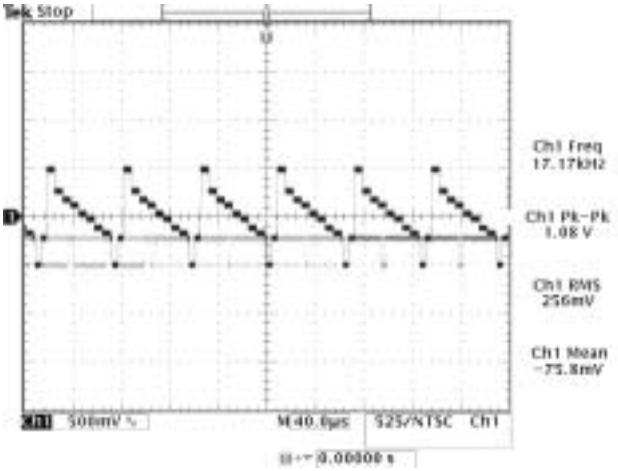
	TENSÃO			TENSÃO			TENSÃO			TENSÃO			TENSÃO			TENSÃO	
PINO	STOP	PLAY	**PINO**	STOP	PLAY	**PINO**	STOP	PLAY	**PINO**	STOP	PLAY	**PINO**	STOP	PLAY	**PINO**	STOP	PLAY
1	1.5V	2.0V	**37**	0.1V	0.1V	**73**	0V	0V	**109**	3.2V	3.2V	**145**	2.2V	2.2V	**181**	3.3V	2.3V
2	2V	2.0V	**38**	3.3V	3.2V	**74**	0V	0V	**110**	0V	0V	**146**	2.2V	2.2V	**182**	2.6V	2.5V
3	1V	2.0V	**39**	2.2V	2.2V	**75**	0V	0V	**111**	2.2V	2.2V	**147**	1.6V	1.6V	**183**	1.2V	1.2V
4	2.3V	2.3V	**40**	3.2V	3.2V	**76**	2.4V	2.4V	**112**	1.8V	1.8V	**148**	1.6V	1.6V	**184**	0V	0V
5	2.4V	2.5V	**41**	1.1V	1.1V	**77**	2.3V	2.3V	**113**	0V	0V	**149**	1.6V	1.6V	**185**	3.2V	3.2V
6	0.3V	1.0V	**42**	0V	0V	**78**	0V	0V	**114**	0.5V	0.5V	**150**	1.6V	1.6V	**186**	0V	3.6V
7	2.6V	2.6V	**43**	3.2V	3.2V	**79**	3.2V	3.2V	**115**	1.2V	1.2V	**151**	1.6V	1.6V	**187**	2.6V	3.7V
8	2.2V	2.6V	**44**	3V	3V	**80**	1.2V	1.2V	**116**	1.2V	1.2V	**152**	2.1V	2.1V	**188**	3.2V	3.2V
9	3.2V	3.2V	**45**	3V	1.2V	**81**	2V	2V	**117**	1.2V	1.2V	**153**	2.1V	2.1V	**189**	0V	0V
10	0V	0V	**46**	3.2V	3.2V	**82**	1.2V	1.2V	**118**	1.2V	1.2V	**154**	1.9V	1.9V	**190**	1.2V	1.1V
11	2.5V	2.2V	**47**	1V	1.4V	**83**	0V	0V	**119**	1.2V	1.2V	**155**	3.2V	3.2V	**191**	0V	0V
12	2.7V	2.5V	**48**	0V	0V	**84**	0V	0V	**120**	0.4V	0.4V	**156**	0.2V	0.2V	**192**	1.3V	1.9V
13	1.7V	2.2V	**49**	1.3V	2.4V	**85**	0.6V	0.6V	**121**	0V	0V	**157**	3.2V	3.2V	**193**	3.1V	2.8V
14	3.1V	2.5V	**50**	1.2V	2V	**86**	0.7V	0.7V	**122**	0.5V	0.4V	**158**	1.9V	1.9V	**194**	2.2V	3.2V
15	1.5V	2.0V	**51**	1V	2.5V	**87**	0.7V	0.4V	**123**	0V	0V	**159**	1.2V	1.2V	**195**	3.1V	2.5V
16	0.9V	1.8V	**52**	1V	1.5V	**88**	0V	0V	**124**	0V	0V	**160**	1.9V	1.9V	**196**	2.5V	3.1V
17	0.1V	0.1V	**53**	1.4V	1.6V	**89**	3.2V	3.2V	**125**	0V	0V	**161**	1V	1V	**197**	3.2V	3.1V
18	1V	0.9V	**54**	1.7V	2.4V	**90**	0.7V	0.7V	**126**	3.2V	3.3V	**162**	1.6V	1.6V	**198**	3.2V	2.5V
19	1.2V	1.2V	**55**	1V	1.2V	**91**	0.8V	0.7V	**127**	1.6V	1.6V	**163**	1.34V	1.34V	**199**	3.1V	2.8V
20	0V	0V	**56**	3.2V	3.2V	**92**	3.2V	3.2V	**128**	1.6V	1.6V	**164**	2.1V	2.1V	**200**	3V	3.1V
21	1V	1.1V	**57**	1.5V	1.2V	**93**	0V	0V	**129**	0V	0V	**165**	0.9	0.9V	**201**	2.2V	1.9V
22	0.6V	1.2V	**58**	1.2V	1.6V	**94**	0V	0V	**130**	3.2V	3.2V	**166**	1.5V	1.5V	**202**	3.2V	2.8V
23	1V	1.2V	**59**	1.3V	1.4V	**95**	2.3V	2.3V	**131**	1.7V	1.7V	**167**	1.5V	1.4V	**203**	1.2V	1.1V
24	1.5V	1.2V	**60**	1.5V	1.3V	**96**	2.3V	2.3V	**132**	3.2V	3.2V	**168**	1.5V	1.5V	**204**	0V	0V
25	3.2V	3.2V	**61**	1V	2V	**97**	3.2V	3.2V	**133**	2V	1.9V	**169**	1.58V	1.58V	**205**	3.2V	3.2V
26	1V	1.0V	**62**	1.1V	1.2V	**98**	0V	0V	**134**	1.3V	1.3V	**170**	1.61V	1.61	**206**	0V	0V
27	0.5V	1.3V	**63**	1.3V	2V	**99**	0V	0V	**135**	1.6V	1.6V	**171**	0V	0V	**207**	1.15V	1.15V
28	0V	0V	**64**	1.2V	1.2V	**100**	0V	0V	**136**	1.65V	1.65V	**172**	1.5V	1.6V	**208**	0V	0V
29	0.5V	0.5V	**65**	0V	0V	**101**	1.2V	1.2V	**137**	1.35V	1.35V	**173**	2.1V	2.1V	**209**	3.2V	3.2V
30	1V	1.3V	**66**	3.1V	2.2V	**102**	0V	0V	**138**	1.8V	1.8V	**174**	3.2V	3.2V	**210**	0V	0V
31	0.7V	1.2V	**67**	0V	0V	**103**	0V	0V	**139**	1V	1V	**175**	3.2V	3.2V	**211**	0V	0V
32	0.1V	0.1V	**68**	0V	0V	**104**	0V	0V	**140**	0V	0V	**176**	0V	0V	**212**	1.2V	1.2V
33	2.2V	2.6V	**69**	3.3V	3.3V	**105**	0V	0V	**141**	1.7V	1.7V	**177**	3.2V	3.2V	**213**	2.2V	2.4V
34	3.2V	3.2V	**70**	1V	0V	**106**	0V	0V	**142**	0V	0V	**178**	0V	3.2V	**214**	1.7V	2V
35	3.2V	3.2V	**71**	1.2V	1.2V	**107**	0V	0V	**143**	1.6V	1.7V	**179**	3.8V	3.8V	**215**	1.5V	2V
36	3.2V	3.2V	**72**	3.6V	3.6V	**108**	2.3V	2.3V	**144**	2.2V	2.2V	**180**	2.3V	2.3V	**216**	2.3V	2V

4- FORMAS DE ONDA

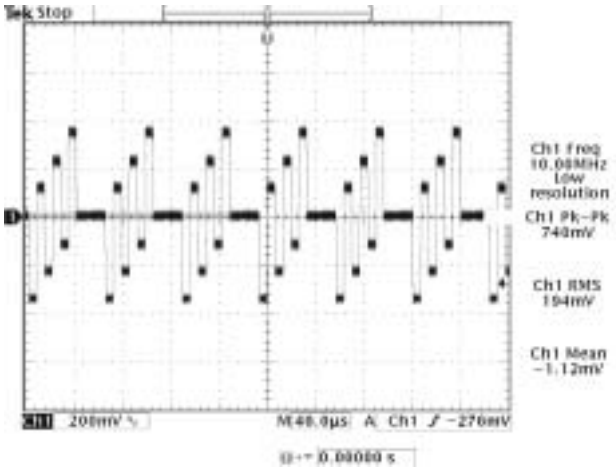
4.1- Formas de onda dos sinais de vídeo



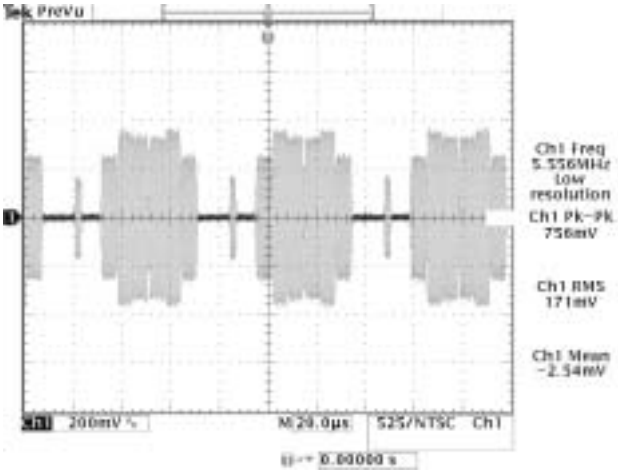
IC100 S5L5008 85Pin (DAC0)



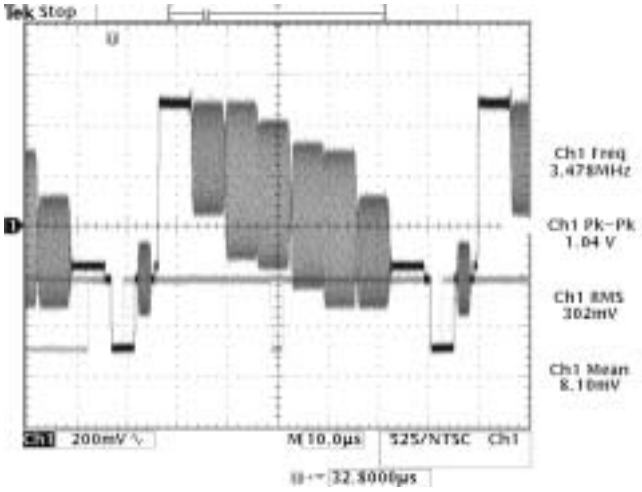
IC100 S5L5008 87Pin(DAC2_Y)



IC100 S5L5008 86Pin(DAC1_PB)

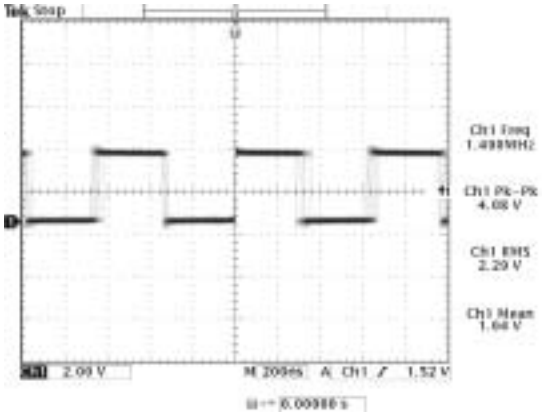


IC100 S5L5008 90Pin(DAC3_C)

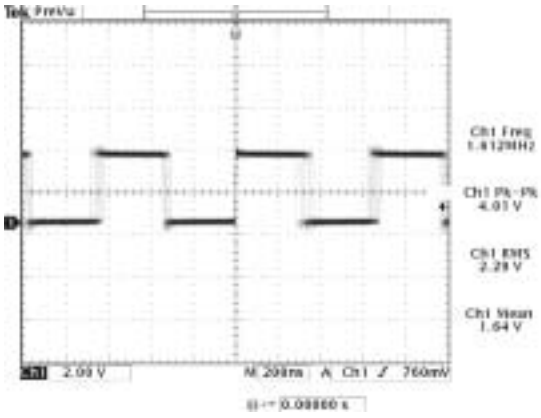


IC100 S5L5008 91Pin(DAC4_CVBS)

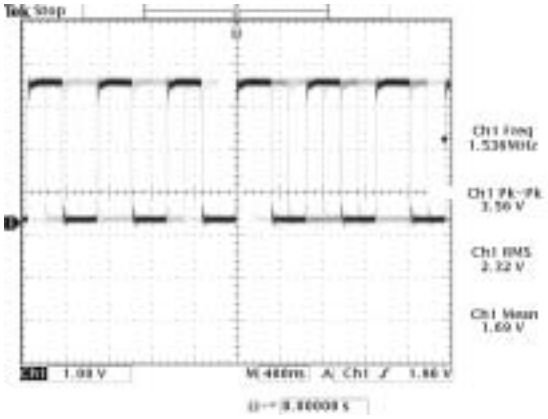
4.2- Formas de onda dos sinais de áudio



C100 S5L5008 95Pin(FR)

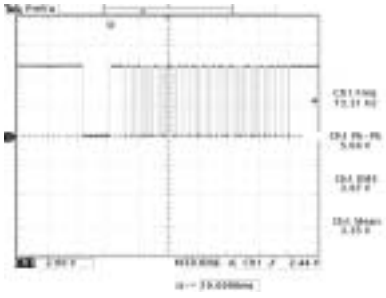


IC100 S5L5008 96Pin(FL)

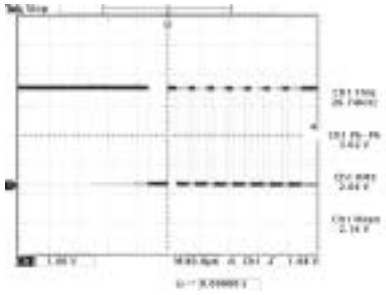


IC100 S5L5008 108Pin(SPDIF_R)

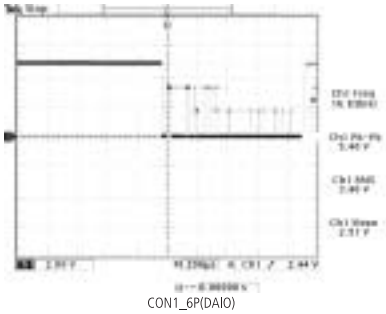
4.3- Formas de onda dos sinais de sistema



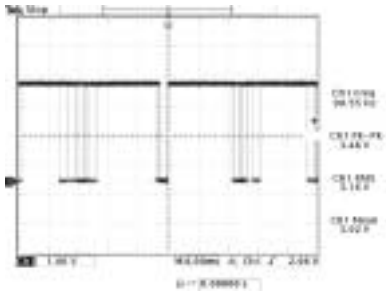
CON1_4P(IR)



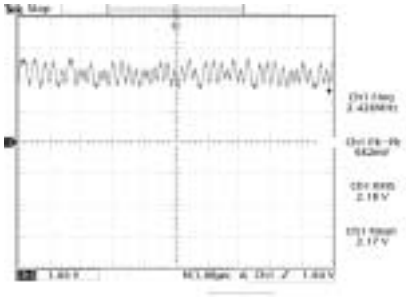
CON1_7P(CLK)



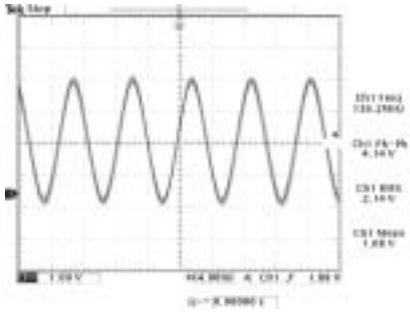
CON1_6P(DAIO)



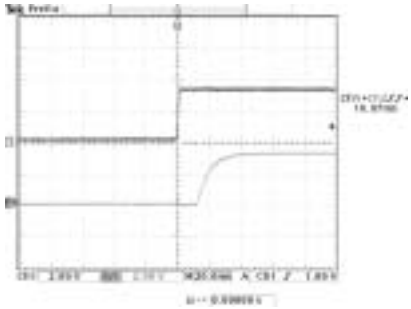
CON1_8P(STB)



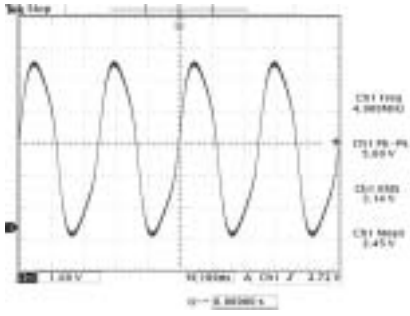
CON1_17P(RF)



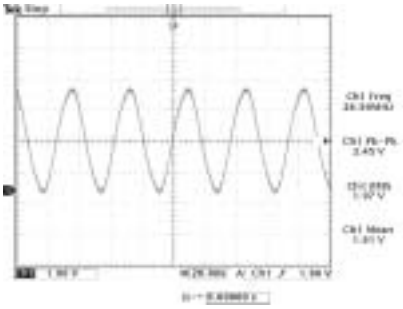
SDRAM CLK



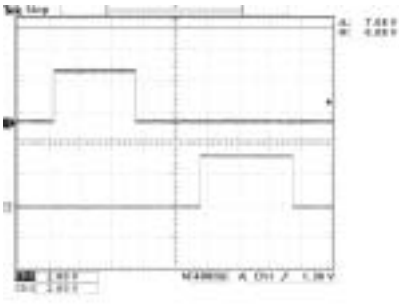
NSYS_RESET_3.3V



Crystal 4MHz



Crystal 27MHz

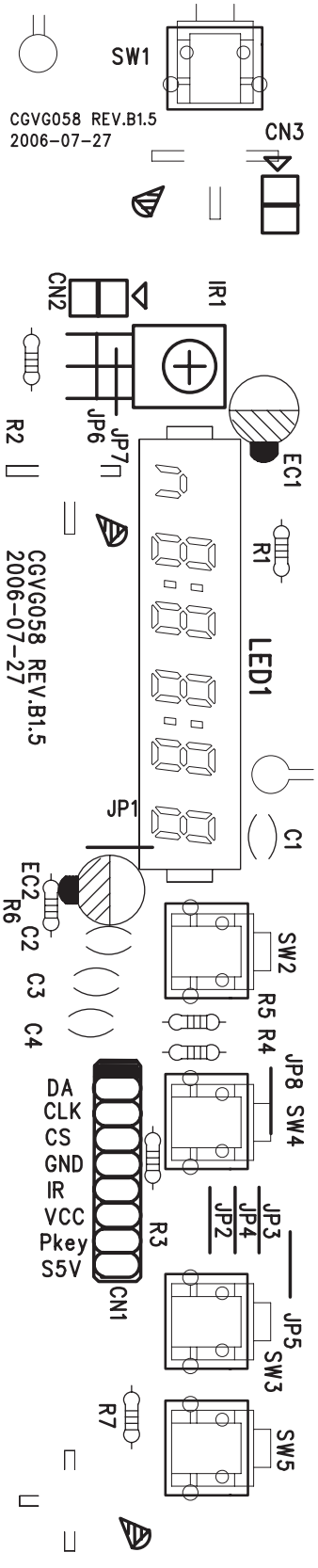


IC1 7Pin,6Pin_open_close

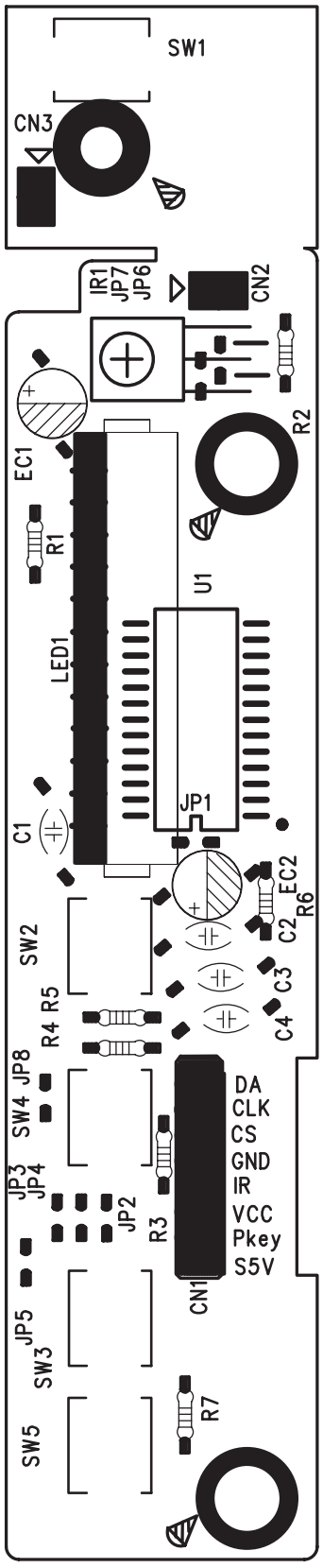
5- LAY-OUT DAS PLACAS DE CIRCUITO IMPRESSO

5.1- Placa de circuito impresso frontal SD7070

Lado superior

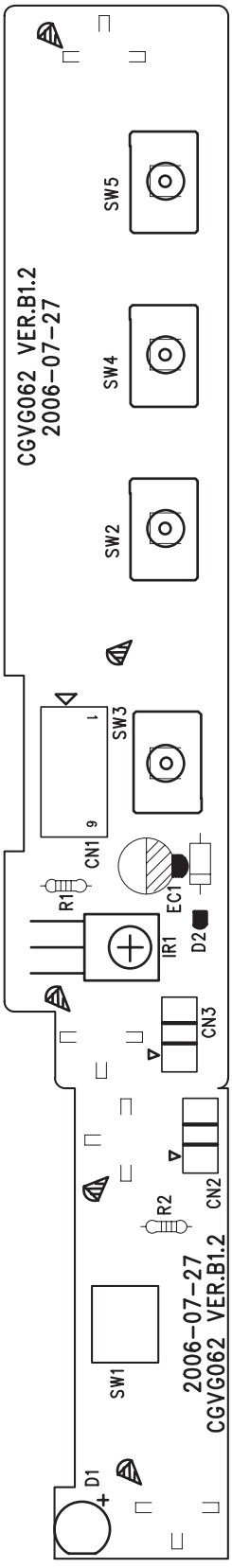


Lado inferior

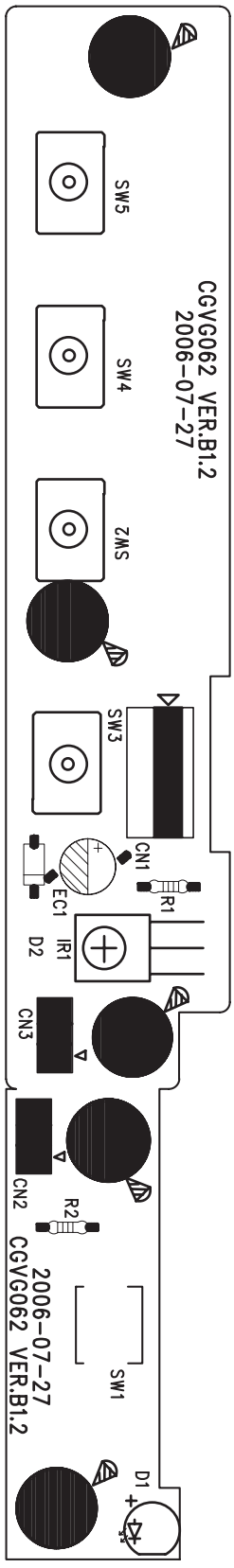


5.2- Placa de circuito impresso frontal SD7050

Lado superior

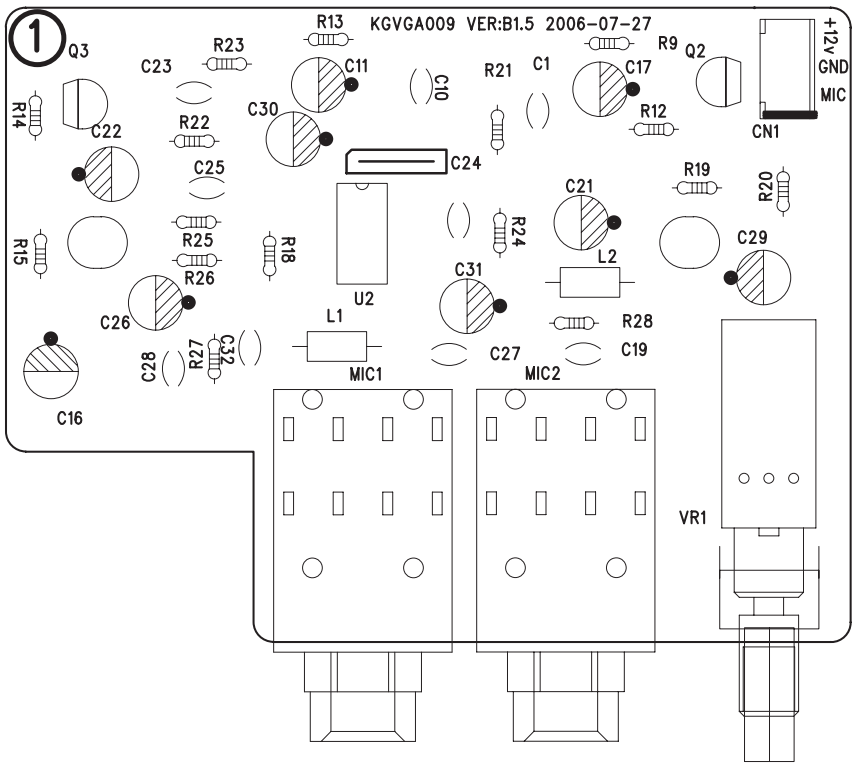


Lado inferior

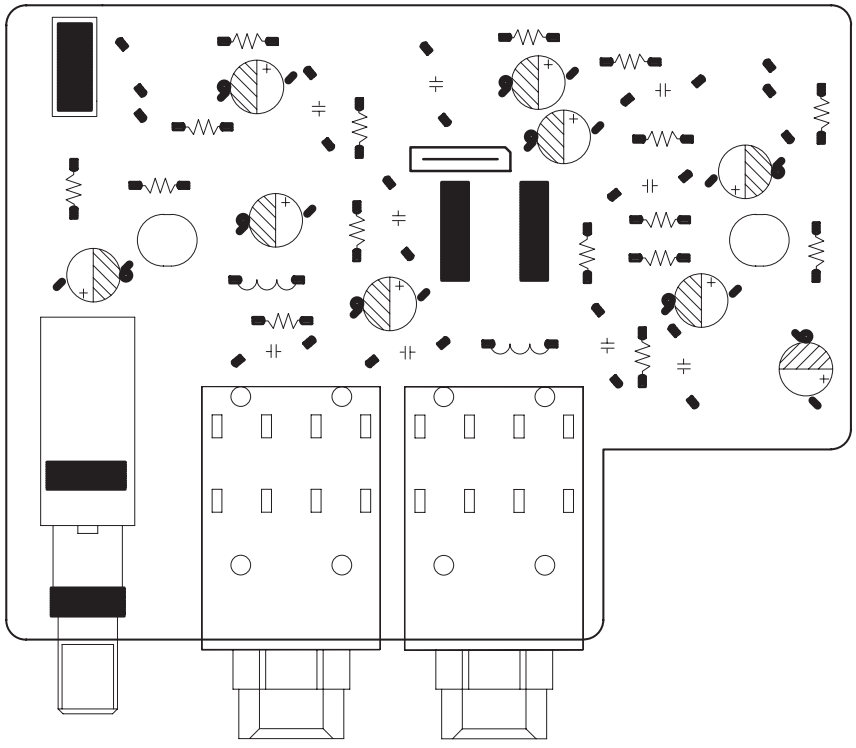


5.3- Placa de circuito impresso microfone SD7070

Lado superior

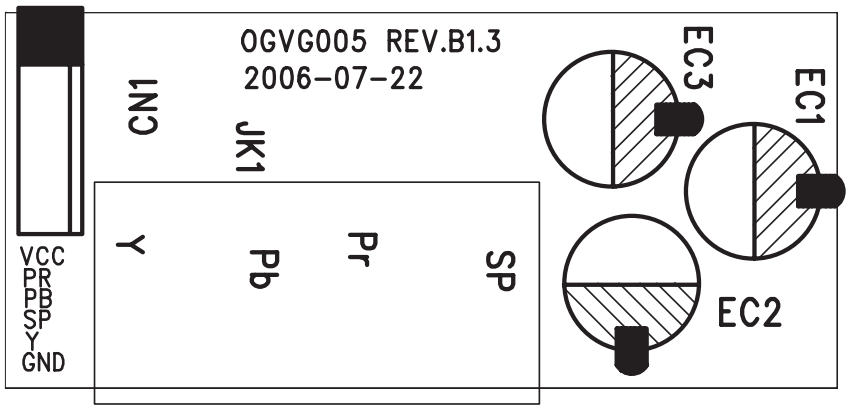


Lado inferior

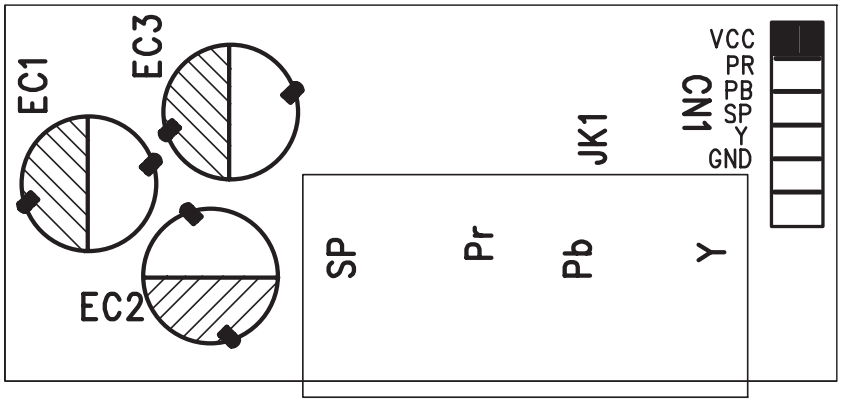


5.4- Placa de circuito impresso YUV

Lado superior

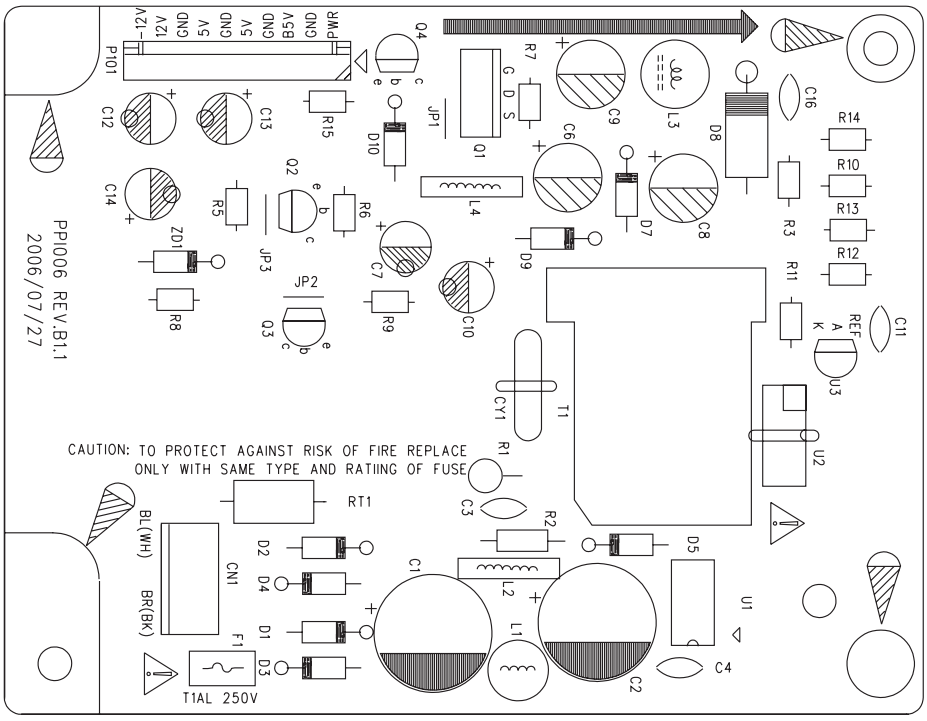


Lado inferior

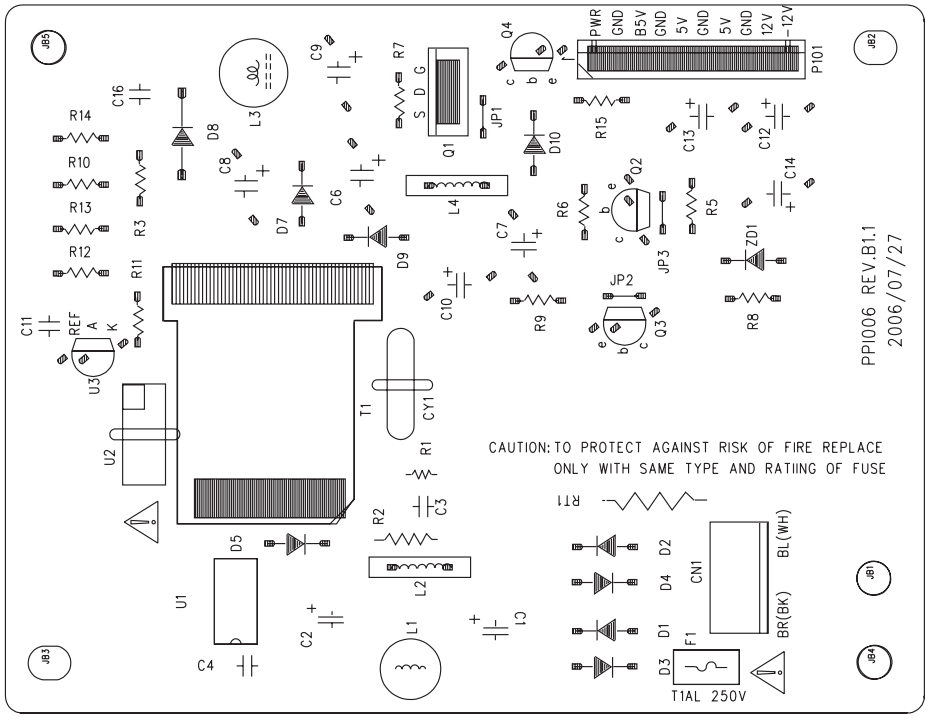


5.5- Placa de circuito impresso Fonte de Alimentação

Lado superior

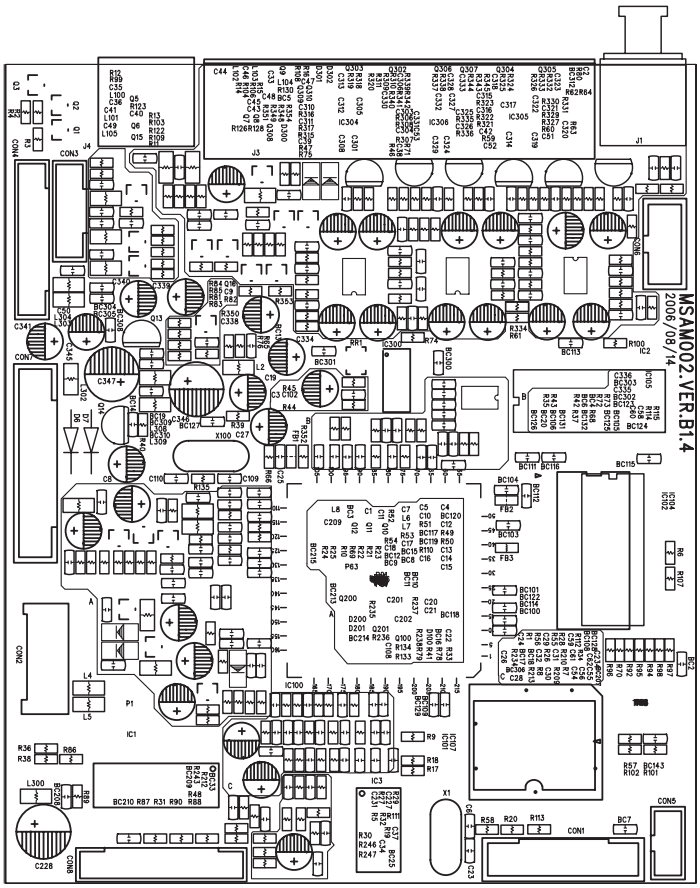


Lado inferior

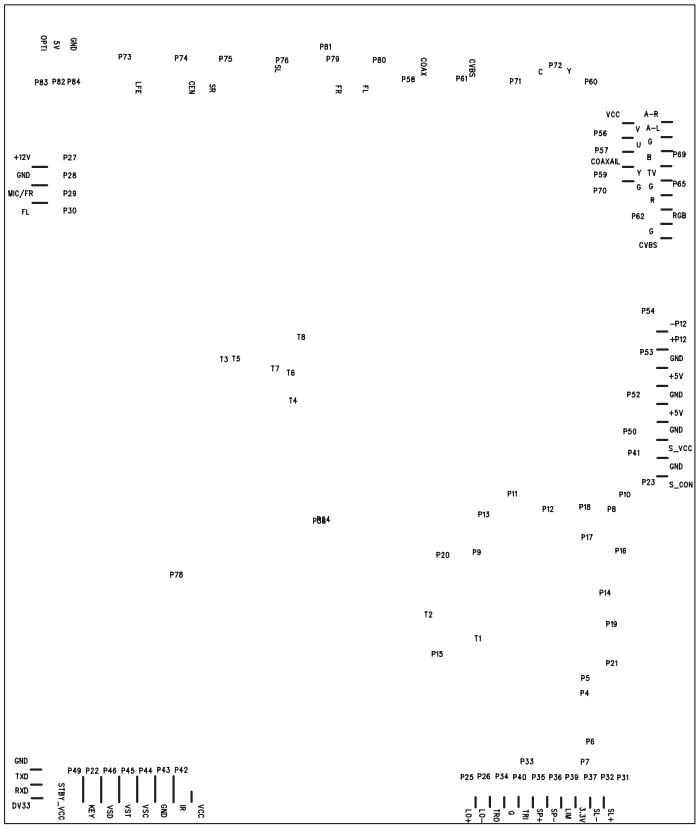


5.6- Placa de circuito impresso principal

Lado superior

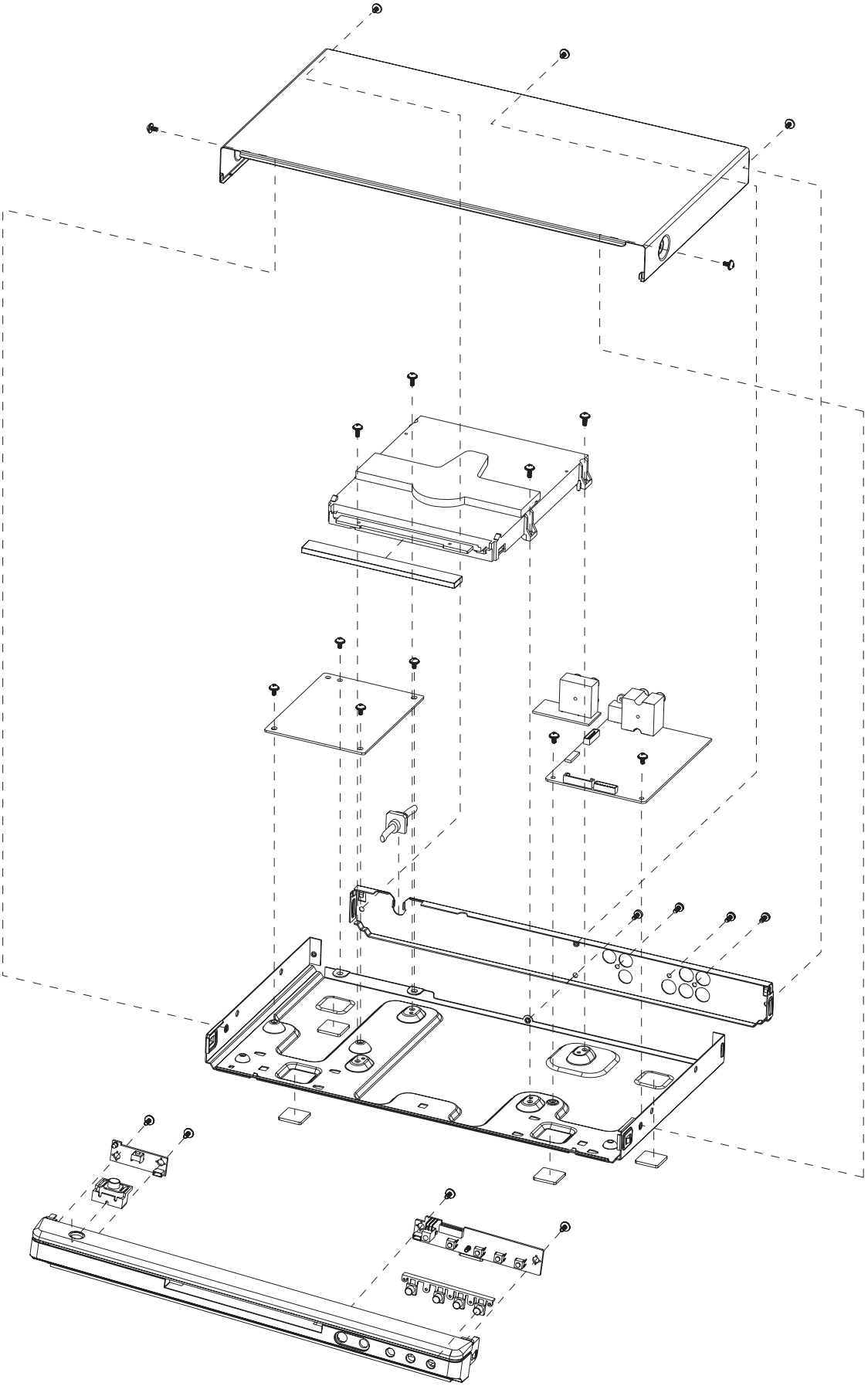


Lado inferior

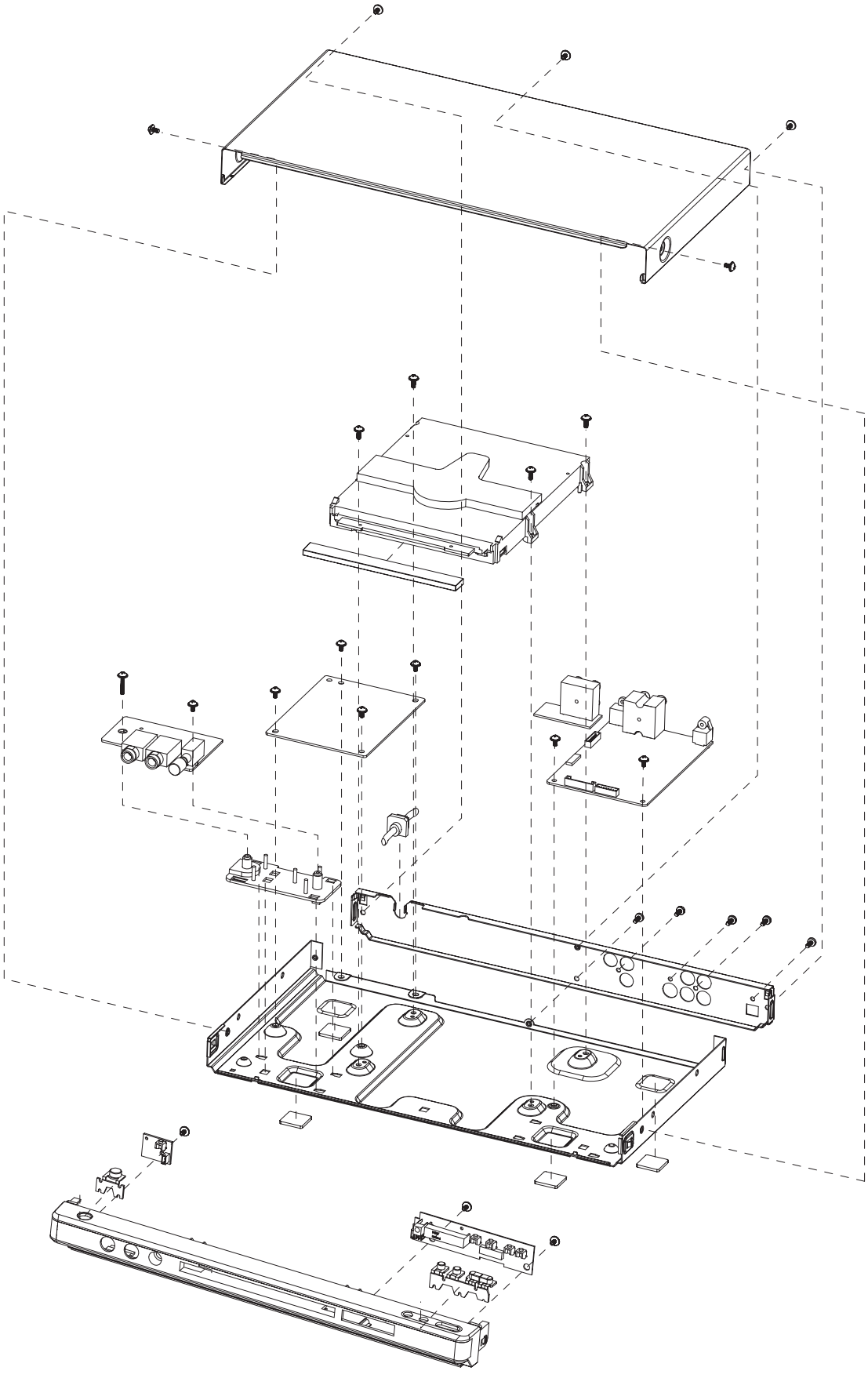


6- VISTA EXPLODIDA

6.1- Vista explodida SD 7050



6.2- Vista explodida SD 7070



7- LISTA DE COMPONENTES

7.1- Mecânicos SD7050

Aparelho		
Posição	**NE**	**Descrição**
CON8/MEC	190549	CABO FLEX 11VIAS L=80MM
AM302A	190563	CABO FLEX 24VIAS L=150MM
CN1	193025	CABO FORCA 2 VIAS C/ CONECTOR
AG307	190638	CHASSI METALICO SD7050/70
AM302EA	190741	ESPACADOR MECANISMO 34X10X2MM
AM302EB	190741	ESPACADOR MECANISMO 34X10X2MM
AC302BA	190683	ISOLADOR C/ ADES 38X38X0,6MM
AM302	190576	MECA SHD-2303 GGV-I2+DL3GV
AG301	191735	PAINEL FRONTAL SD7050S MONT
PCIFT3	191762	PCI FONTE 7050 MONT
PCIPR	190512	PCI PRINCIPAL SD7050 MONTADO
PCIYU2	191478	PCI YUV 7050/70 MONT
AG307RA	190692	PE BORRACHA 17X17X3MM
AG307RB	190692	PE BORRACHA 17X17X3MM
AG307RC	190692	PE BORRACHA 17X17X3MM
AG307RD	190692	PE BORRACHA 17X17X3MM
AG359	190497	PORTA DVD SD7050
AG302	190625	TAMPA SUPERIOR SD7050/70
AG308	191606	TAMPA TRASEIRA C/ IMPRESSAO
AE305	157899	CONTROLE REMOTO DVD3150 MONT
AE309	191771	MANUAL INSTRUCAO SD7050S
AE301	193515	CAIXA EMBALAGEM
AE302	193524	CALCO DIR (POLPA)
AE303	193533	CALCO ESQ (POLPA)

Painel Frontal		
Posição	**NE**	**Descrição**
AG301E	190475	LENTE LED SD7050
AG301H	190484	LENTE SENSOR CR SD7050
AG301A	190442	PAINEL FRONTAL C/ GRAFISMO
PCICO3	191726	PCI CONTR 7050 MONT
AG301B	190466	TECLA FUNCOES SD7050
AG301C	190451	TECLA POWER/STANDBY SD7050

Controle remoto		
Posição	**NE**	**Descrição**
AA02	156658	GABINETE INFERIOR CR DVD3150
AA01	156667	GABINETE SUPERIOR CR DVD3150
M03	156710	MOLA CONTATO PILHA POS/NEG
PCICR3	157924	PCI CR DVD3150 MONT
AA03	156676	TAMPA COMP BATERIA CRDVD3150
K01	156685	TECLADO BORRACHA CR DVD3150

7.2- Eletro-Eletrônicos SD7050

PCI Controle Remoto		
Posição	**NE**	**Descrição**
C1	156752	CAP ELCO 47R J 16V 105G RT050
C2	158340	CAP CERA 301 K 25V Y5V 2012
C3	158340	CAP CERA 301 K 25V Y5V 2012
C4	156765	CAP CERA 104 M 50V Y5V RT050
IC1	156725	CIRC INT KXM013-183 SOP 20
LED1	156738	DIODO LED IR-5113CA-A2 050
M01	156694	MOLA CONTATO PILHA POSITIVO
M02	156707	MOLA CONTATO PILHA NEGATIVO
Q1	156747	TRANS S9015 PNP PACK5
R1	158353	RES META 27R J 1/10W 2012TSMD
X1	158335	FILTRO RESSON CER 455KHZ

PCI Fonte/AV		
Posição	**NE**	**Descrição**
C1	190834	CAP ELCO 15R M 450V 105G RG050
C10	157318	CAP ELCO 101 M 25V 105G RT050
C11	157265	CAP CERA 104 M 50V Y5V RT050
C13	190304	CAP ELCO 471 M 16V 105G RT050
C14	157318	CAP ELCO 101 M 25V 105G RT050
C16	157270	CAP CERA 102 M 50V Y5V RT050
C2	190834	CAP ELCO 15R M 450V 105G RG050
C3	157289	CAP CERA 102 M 1KV Y5V RT050
C4	157265	CAP CERA 104 M 50V Y5V RT050
C6	157318	CAP ELCO 101 M 25V 105G RT050
C8	190313	CAP ELCO 102 M 16V 105G RT050
CN1	190377	CONECTOR VH3.96MM 3P
CY1	157256	CAP CERA 471 K 400V Y1 RG100
D1	157390	DIODO RET 1N4007 DO41 AT26
D10	157387	DIODO SIN 1N4148 DO34 AT26
D2	157390	DIODO RET 1N4007 DO41 AT26
D3	157390	DIODO RET 1N4007 DO41 AT26
D4	157390	DIODO RET 1N4007 DO41 AT26
D5	157390	DIODO RET 1N4007 DO41 AT26
D7	157434	DIODO SCH FR105 DO41 AT26
D8	157425	DIODO SCH SB340 DO201 150C
D9	157434	DIODO SCH FR105 DO41 AT26
F1	157522	FUSI SMT T 1A 250V RT50
L1	157363	BOBINA CHOQ 104 K 0.2A RT50
L2	156565	BOBINA NFER RH3.5*4.7*0.8 AT26
L3	157354	BOBINA CHOQ 10R K 2A RT50
L4	157345	BOBINA CHOQ 4R7 K AT26
P101	190380	CONECTOR VH2,54MM 10P/10P
R1	172710	RES CARB 124 J 1,0W 050 T=4MM
R10	157190	RES CARB 101 J 1/8W AT26
R11	157216	RES CARB 202 J 1/8W AT26
R12	157181	RES CARB 102 J 1/8W AT26
R13	157243	RES MPRE 1002 F 1/8W AT26
R14	157243	RES MPRE 1002 F 1/8W AT26
R2	157190	RES CARB 101 J 1/8W AT26
R3	157163	RES CARB 10R J 1/8W AT26
T1	190326	TRAFO FORCA EEL-19 BCK19E-315A
U1	190340	CIRC INT TNY267PN DIP8
U2	190359	CIRC INT EL817 DIP4
U3	190331	CIRC INT AZ431BZATRE1TO92PACK5

PCI Controles		
Posição	**NE**	**Descrição**
CN1	190420	CONECTOR CABO 6 VIAS L=110MM
CN2/CN3	190433	CONECTOR CABO 3 VIAS L=215MM

PCI Controles		
Posição	**NE**	**Descrição**
D1	190399	DIODO LED VM 3MM
D2	157387	DIODO SIN 1N4148 DO34 AT26
EC1	156805	CAP ELCO 101 M 16V 105G RT050
IR1	190157	RECEPTOR REMOTO SM3385JMHS
R1	190095	RES CARB 222 J 1/6W AT26
R2	156783	RES CARB 101 J 1/6W AT26
SW1	190117	CHAVE TACT 6*6*5 AXIAL 12V
SW2	190402	CHAVE TACT KFC-6-6-5H-2 12V
SW3	190402	CHAVE TACT KFC-6-6-5H-2 12V
SW4	190402	CHAVE TACT KFC-6-6-5H-2 12V
SW5	190402	CHAVE TACT KFC-6-6-5H-2 12V

PCI YUV		
Posição	**NE**	**Descrição**
C1	156164	CAP ELCO 471 M 10V 105G RT050
C2	156164	CAP ELCO 471 M 10V 105G RT050
C3	156164	CAP ELCO 471 M 10V 105G RT050
CN1	190843	CONECTOR 6V C/ CABO 5VIAS 60MM
JK1	156182	TOMADA RCA AV3-8.4-10D-F 2,6MM

PCI Principal		
Posição	**NE**	**Descrição**
CON2	173112	CONECTOR FPC 24P 0.5MM VERT
D100	193270	DIODO SIN 1N4148 DO35 MELF
D200	193270	DIODO SIN 1N4148 DO35 MELF
D201	193270	DIODO SIN 1N4148 DO35 MELF
D300	193285	DIODO SIN DAP202K SOT23 SMD
D301	193270	DIODO SIN 1N4148 DO35 MELF
D302	193270	DIODO SIN 1N4148 DO35 MELF
D6	193261	DIODO RET 1N4001 DO41
D7	193261	DIODO RET 1N4001 DO41
IC1	193365	CIRC INT AT5669 HSOP
IC100	193350	CIRC INT S5L5008 QFP216
IC101	193329	CIRC INT ES29LV400 SD7050
IC104	193347	CIRC INT AD16162VT-6 TSOP50
IC105	193301	CIRC INT TU24C02CSF SOP8
IC304	193383	CIRC INT AZ4558CM-E1SOP8
Q10	173247	TRANS 2N3904 SOT23 08180
Q100	173261	TRANS SS8050 SOT23 08180
Q11	173247	TRANS 2N3904 SOT23 08180
Q12	173247	TRANS 2N3904 SOT23 08180
Q13	173289	TRANS S8550 TO92 PACK5
Q14	173289	TRANS S8550 TO92 PACK5
Q15	173238	TRANS 2N3906 SOT23 08180
Q16	173261	TRANS SS8050 SOT23 08180
Q200	173238	TRANS 2N3906 SOT23 08180
Q201	173238	TRANS 2N3906 SOT23 08180
Q302	193294	TRANS D1302 TO92
Q303	193294	TRANS D1302 TO92
Q308	173247	TRANS 2N3904 SOT23 08180
Q309	173274	TRANS SS8550 SOT23 08180
Q310	173274	TRANS SS8550 SOT23 08180
Q5	173238	TRANS 2N3906 SOT23 08180
Q6	173238	TRANS 2N3906 SOT23 08180
Q9	173238	TRANS 2N3906 SOT23 08180
X100	173412	CRISTAL 27MHZ 27P HC-49/S

7.3- Mecânicos SD7070

Aparelho		
Posição	**NE**	**Descrição**
AG301D	190594	BOTAO VOLUME SD7070
CN8/MEC	190549	CABO FLEX 11VIAS L=80MM
AM302A	190563	CABO FLEX 24VIAS L=150MM
CN1	193025	CABO FORCA 2 VIAS C/ CONECTOR
AG307	190638	CHASSI METALICO SD7050/70
AM302EA	190741	ESPAÇADOR MECANISMO 34X10X2MM
AM302EB	190741	ESPAÇADOR MECANISMO 34X10X2MM
AC302AA	190683	ISOLADOR C/ ADES 38X38X0,6MM
AM302	190576	MECA SHD-2303 GGV-I2+DL3GV
AG301	191483	PAINEL FRONTAL SD7070VK MONT
PCIFT3	191456	PCI FONTE 7070 MONT
PCIMI3	191511	PCI MIC 7070 MONT
PCIPR	190705	PCI PRINCIPAL SD7070 MONTADO
PCIYU2	191478	PCI YUV 7050/70 MONT
AG307RA	190692	PE BORRACHA 17X17X3MM
AG307RB	190692	PE BORRACHA 17X17X3MM
AG307RC	190692	PE BORRACHA 17X17X3MM
AG307RD	190692	PE BORRACHA 17X17X3MM
AG359	190581	PORTA DVD SD7070
AG307A	190616	SUPORTE PLASTICO MIC GVG-679
AG302	190625	TAMPA SUPERIOR SD7050/70
AG308	191615	TAMPA TRASEIRA C/ IMPRESSAO
AE305	157899	CONTROLE REMOTO DVD3150 MONT

Aparelho		
Posição	**NE**	**Descrição**
AE309	191575	MANUAL INSTRUCAO SD7070VK
AE301	193542	CAIXA EMBALAGEM
AE302	193524	CALCO DIR (POLPA)
AE303	193533	CALCO ESQ (POLPA)

Painel Frontal		
Posição	**NE**	**Descrição**
AG301D	190251	ORNAMENTO PLASTICO DIREITO
AG301E	190264	ORNAMENTO PLASTICO ESQUERDO
AG301A	190228	PAINEL FRONTAL C/ GRAFISMO
PCICO4	191557	PCI CONTR 7070 MONT
AG301B	190242	TECLA FUNCOES SD7070
AG301C	190237	TECLA POWER/STANDBY SD7070
AG301F	190601	VISOR DISPLAY SD7070

Controle remoto		
Posição	**NE**	**Descrição**
AA02	156658	GABINETE INFERIOR CR DVD3150
AA01	156667	GABINETE SUPERIOR CR DVD3150
M03	156710	MOLA CONTATO PILHA POS/NEG
PCICR3	157924	PCI CR DVD3150 MONT
AA03	156676	TAMPA COMP BATERIA CRDVD3150
K01	156685	TECLADO BORRACHA CR DVD3150

7.4- Eletro-Eletrônicos SD7070

PCI Controle Remoto		
Posição	**NE**	**Descrição**
C1	156752	CAP ELCO 47R J 16V 105G RT050
C2	158340	CAP CERA 301 K 25V Y5V 2012
C3	158340	CAP CERA 301 K 25V Y5V 2012
C4	156765	CAP CERA 104 M 50V Y5V RT050
IC1	156725	CIRC INT KXM013-183 SOP 20
LED1	156738	DIODO LED IR-5113CA-A2 050
M01	156694	MOLA CONTATO PILHA POSITIVO
M02	156707	MOLA CONTATO PILHA NEGATIVO
Q1	156747	TRANS S9015 PNP PACK5
R1	158353	RES META 27R J 1/10W 2012TSMD
X1	158335	FILTRO RESSON CER 455KHZ

PCI Fonte/AV		
Posição	**NE**	**Descrição**
C1	190834	CAP ELCO 15R M 450V 105G RG050
C10	157318	CAP ELCO 101 M 25V 105G RT050
C11	157265	CAP CERA 104 M 50V Y5V RT050
C12	157332	CAP ELCO 47R M 25V 85G RT050
C13	157309	CAP ELCO 221 M 10V 105G RT050
C14	157318	CAP ELCO 101 M 25V 105G RT050
C16	157270	CAP CERA 102 M 50V Y5V RT050
C2	190834	CAP ELCO 15R M 450V 105G RG050
C3	157289	CAP CERA 102 M 1KV Y5V RT050
C4	157265	CAP CERA 104 M 50V Y5V RT050
C6	157318	CAP ELCO 101 M 25V 105G RT050
C7	157332	CAP ELCO 47R M 25V 85G RT050
C8	190313	CAP ELCO 102 M 16V 105G RT050
C9	190304	CAP ELCO 471 M 16V 105G RT050
CN1	190377	CONECTOR VH3.96MM 3P
CY1	157256	CAP CERA 471 K 400V Y1 RG100
D1	157390	DIODO RET 1N4007 DO41 AT26
D10	157387	DIODO SIN 1N4148 DO34 AT26
D2	157390	DIODO RET 1N4007 DO41 AT26
D3	157390	DIODO RET 1N4007 DO41 AT26
D4	157390	DIODO RET 1N4007 DO41 AT26
D5	157390	DIODO RET 1N4007 DO41 AT26
D7	157434	DIODO SCH FR105 DO41 AT26
D8	157425	DIODO SCH SB340 DO201 150C
D9	157434	DIODO SCH FR105 DO41 AT26
F1	157522	FUSI SMT T 1A 250V RT50
L1	157363	BOBINA CHOQ 104 K 0.2A RT50
L2	156565	BOBINA NFER RH3.5*4.7*0.8 AT26
L3	157354	BOBINA CHOQ 10R K 2A RT50
L4	157345	BOBINA CHOQ 4R7 K AT26
P101	190380	CONECTOR VH2,54MM 10P/10P
Q1	157458	TRANS CEP63A3 TO220 L2525
Q2	157461	TRANS 2N5401 TO92 PACK5
Q3	157443	TRANS 2N5551 TO92 PACK5
Q4	157443	TRANS 2N5551 TO92 PACK5
R1	172710	RES CARB 124 J 1,0W 050 T=4MM
R10	157190	RES CARB 101 J 1/8W AT26
R11	157216	RES CARB 202 J 1/8W AT26
R12	157181	RES CARB 102 J 1/8W AT26
R13	157243	RES MPRE 1002 F 1/8W AT26
R14	157243	RES MPRE 1002 F 1/8W AT26
R15	157225	RES CARB 682 J 1/8W AT26
R2	157190	RES CARB 101 J 1/8W AT26
R3	157163	RES CARB 10R J 1/8W AT26

PCI Fonte/AV		
Posição	**NE**	**Descrição**
R5	157172	RES CARB 103 J 1/8W AT26
R6	157201	RES CARB 471 J 1/8W AT26
R7	157172	RES CARB 103 J 1/8W AT26
R8	157181	RES CARB 102 J 1/8W AT26
R9	157216	RES CARB 202 J 1/8W AT26
T1	190326	TRAFO FORCA EEL-19 BCK19E-315A
U1	190340	CIRC INT TNY267PN DIP8
U2	190359	CIRC INT EL817 DIP4
U3	190331	CIRC INT AZ431BZATRE1TO92PACK5
ZD1	157403	DIODO ZEN 12V 1/2W DO35 AT26

PCI Controles		
Posição	**NE**	**Descrição**
C1	156792	CAP CERA 104 Z 50V Y5V RT050
C2	156459	CAP CERA 101 K 50V Y5V RT050
C3	156459	CAP CERA 101 K 50V Y5V RT050
C4	156459	CAP CERA 101 K 50V Y5V RT050
CN1	190148	CABO FLEX 8VIAS L=110MM
CN2/CN3	190139	CABO FLEX 2 VIAS L=240MM
EC1	156805	CAP ELCO 101 M 16V 105G RT050
EC2	156805	CAP ELCO 101 M 16V 105G RT050
IR1	190157	RECEPTOR REMOTO SM3385JMHS
LED1	190108	DISPLAY LED ZDC-G7102YGB-15
R1	190095	RES CARB 222 J 1/6W AT26
R2	156306	RES CARB 103 J 1/6W AT26
R3	156306	RES CARB 103 J 1/6W AT26
R4	156306	RES CARB 103 J 1/6W AT26
R5	156306	RES CARB 103 J 1/6W AT26
R6	156774	RES CARB 513 J 1/6W AT26
R7	156306	RES CARB 103 J 1/6W AT26
SW1	190117	CHAVE TACT 6*6*5 AXIAL 12V
SW2	190117	CHAVE TACT 6*6*5 AXIAL 12V
SW3	190117	CHAVE TACT 6*6*5 AXIAL 12V
SW4	190117	CHAVE TACT 6*6*5 AXIAL 12V
SW5	190117	CHAVE TACT 6*6*5 AXIAL 12V
U1	156818	CIRC INT W6928 SOP28

PCI YUV		
Posição	**NE**	**Descrição**
C1	156164	CAP ELCO 471 M 10V 105G RT050
C2	156164	CAP ELCO 471 M 10V 105G RT050
C3	156164	CAP ELCO 471 M 10V 105G RT050
CN1	190843	CONECTOR 6V C/ CABO 5VIAS 60MM
JK1	156182	TOMADA RCA AV3-8.4-10D-F 2,6MM

PCI Microfone		
Posição	**NE**	**Descrição**
C1	156435	CAP CERA 104 K 50V Y5V RT050
C10	156435	CAP CERA 104 K 50V Y5V RT050
C11	156538	CAP ELCO 221 M 16V 105G RT050
C16	156547	CAP ELCO 10R M 50V 105G RT050
C17	156547	CAP ELCO 10R M 50V 105G RT050
C19	156444	CAP CERA 102 K 50V Y5V RT050
C21	156547	CAP ELCO 10R M 50V 105G RT050
C22	156514	CAP ELCO 101 M 16V 105G RT050
C23	156435	CAP CERA 104 K 50V Y5V RT050
C24	156459	CAP CERA 101 K 50V Y5V RT050
C25	156459	CAP CERA 101 K 50V Y5V RT050

PCI Microfone		
Posição	**NE**	**Descrição**
C26	156547	CAP ELCO 10R M 50V 105G RT050
C27	156444	CAP CERA 102 K 50V Y5V RT050
C28	156444	CAP CERA 102 K 50V Y5V RT050
C29	156501	CAP ELCO 4R7 M 50V 105G RT050
C30	156501	CAP ELCO 4R7 M 50V 105G RT050
C31	156547	CAP ELCO 10R M 50V 105G RT050
C32	156444	CAP CERA 102 K 50V Y5V RT050
CN06	156621	ANEL DE FERRITE 16X12X8MM
CN1	190219	CONECTOR CABO BLIND4P/3P 580MM
L1	156565	BOBINA NFER RH3.5*4.7*0.8 AT26
L2	156565	BOBINA NFER RH3.5*4.7*0.8 AT26
MIC1	190200	CONECTOR MIC 8P SILVER
MIC2	190200	CONECTOR MIC 8P SILVER
Q2	156583	TRANS C1815 TO92 PACK5
Q3	156592	TRANS 2SA1015 TO92 PACK5
R12	156342	RES CARB 473 J 1/6W AT26
R13	156280	RES CARB 102 J 1/6W AT26
R14	156342	RES CARB 473 J 1/6W AT26
R15	156306	RES CARB 103 J 1/6W AT26
R18	156280	RES CARB 102 J 1/6W AT26
R19	156306	RES CARB 103 J 1/6W AT26
R20	156351	RES CARB 104 J 1/6W AT26
R21	156280	RES CARB 102 J 1/6W AT26
R22	156306	RES CARB 103 J 1/6W AT26
R23	156306	RES CARB 103 J 1/6W AT26
R24	156351	RES CARB 104 J 1/6W AT26
R25	190166	RES CARB 392 J 1/6W AT26
R26	156280	RES CARB 102 J 1/6W AT26
R27	156280	RES CARB 102 J 1/6W AT26
R28	156280	RES CARB 102 J 1/6W AT26
R9	156364	RES CARB 33R J 1/6W AT26
U2	190180	CIRC INT AZ4558CP-E1 DIP8
VR1	190171	POT R09SPN-A3-25F-A10K-F004

PCI Principal		
Posição	**NE**	**Descrição**
CON2	173112	CONECTOR FPC 24P 0.5MM VERT
D100	193270	DIODO SIN 1N4148 DO35 MELF
D200	193270	DIODO SIN 1N4148 DO35 MELF
D201	193270	DIODO SIN 1N4148 DO35 MELF
D300	193285	DIODO SIN DAP202K SOT23 SMD
D301	193270	DIODO SIN 1N4148 DO35 MELF
D302	193270	DIODO SIN 1N4148 DO35 MELF
D6	193261	DIODO RET 1N4001 DO41
D7	193261	DIODO RET 1N4001 DO41
IC1	193365	CIRC INT AT5669 HSOP
IC100	193350	CIRC INT S5L5008 QFP216
IC101	193338	CIRC INT ES29LV400 SD7070
IC102	193374	CIRC INT MMSD416T216 TSOP54
IC105	193301	CIRC INT TU24C02CSF SOP8
IC3	193392	CIRC INT V61P56N SOP18
IC304	193383	CIRC INT AZ4558CM-E1SOP8
Q10	173247	TRANS 2N3904 SOT23 08180
Q100	173261	TRANS SS8050 SOT23 08180
Q11	173247	TRANS 2N3904 SOT23 08180
Q12	173247	TRANS 2N3904 SOT23 08180
Q13	173289	TRANS S8550 TO92 PACK5
Q14	173289	TRANS S8550 TO92 PACK5
Q15	173238	TRANS 2N3906 SOT23 08180
Q16	173261	TRANS SS8050 SOT23 08180
Q200	173238	TRANS 2N3906 SOT23 08180
Q201	173238	TRANS 2N3906 SOT23 08180
Q302	193294	TRANS D1302 TO92
Q303	193294	TRANS D1302 TO92
Q308	173247	TRANS 2N3904 SOT23 08180
Q309	173274	TRANS SS8550 SOT23 08180
Q310	173274	TRANS SS8550 SOT23 08180
Q5	173238	TRANS 2N3906 SOT23 08180
Q6	173238	TRANS 2N3906 SOT23 08180
Q7	173238	TRANS 2N3906 SOT23 08180
Q8	173238	TRANS 2N3906 SOT23 08180
Q9	173238	TRANS 2N3906 SOT23 08180
X1	193409	CRISTAL 4MHZ 22P HC-49/S
X100	173412	CRISTAL 27MHZ 27P HC-49/S

ANOTAÇÕES

ANOTAÇÕES

SEMP TOSHIBA

Administração Geral:
Av. João Dias, 2476 CEP 04724-003 - São Paulo - SP - PABX (0xx11) 5641-2100

NE 737698

Rev. 01 - Ago / 06